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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

A NEW DRAINAGE-TUBE

FOR THE TREATMENT OF SUPPURATIVE PLEURITIS, WITH
REMARKS.

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Professional opinion appears at present to have become definitely settled in favor of the treatment of suppurative pleuritis by surgical measures. Among the causes of this are to be noted the almost uniformly unfavorable results obtained by strictly medicinal treatment. Even in those cases where spontaneous opening upon the external surface took place the disease usually ran an unfavorable course. The opening under such circumstances ordinarily occurred in the fourth intercostal space and in front of the anterior axillary line. Complete evacuation of the purulent contents of the pleural cavity was therefore not affected by spontaneous rupture. Formerly, when physical diagnosis was in its infancy, few physicians were practically familiar with auscultation and percussion; hence they were not inclined to invade the close cavities when they could

at most suspect the presence of pus. The certainty and ease with which the diagnosis of suppurative pleuritis can be made out is doubtless also a cause of our preference now-a-days for surgical methods which are direct, speedy, and generally successful in their results. Simple tapping and immediate closure of the opening, and aspiration have never, in my observation, sufficed to cure a single case. When aspiration has been repeatedly performed the pus tends to trickle out at the point aspirated, and permanent drainage becomes thus accidentally established. This I have also seen happen in cases of hepatic abscess.

Indeed permanent drainage is the only measure which offers a reasonable prospect of cure. This statement is justified by a careful study and analysis of many cases, and of the records of several hundred cases, among which are those published several years since by Prof. E. Bull, of Christiania, Norway.

The mode of establishing permanent drainage in these cases is a question about which different opinions are entertained.

The excision of a portion of a rib seems to be an unnecessarily severe procedure. Trephining a rib doubtless gives free exit to the pus, and many cases have needed no other aid to secure recovery. I have, however, seen cases in which suppurative action in the pleura was protracted, and the opening made with the trephine had soon closed from the rapid formation of new bone. When these cases afterward fell under my observation the pleural cavity had again filled up with pus, while the opening in the side had completely healed, and it was necessary to perform another operation.

For several years I made use of a silver tube of sufficient length and caliber, slightly curved, beveled at one end, and armed near the other end with a shield to prevent its slipping into the thorax. By this means permanent drainage was easily maintained for any length of time, and injections into the pleural cavity could be made through it with perfect convenience. But occasionally it was not well borne. Its presence occasioned cough, pain, or a sense of discomfort, especially when the patient rolled

over in bed on the affected side. In order to remove these defects I devised the instrument represented in the accompanying woodcut. It was made for me by Tiemann & Co., of New York, and is composed of an India-rubber tube sufficiently soft to be flexible and to adapt itself to the internal surface of the chest, and yet of firm enough texture to maintain its form and allow constant and free exit through its lumen. It is five inches long; the inner extremity is beveled. One inch from the outer extremity is a shield, an inch and a quarter in diameter, attached obliquely to the tube, and perforated at each side so as to admit of being fastened to the chest by means of tapes passing through these openings and tied around the body. The tube is one quarter of an inch in diameter.



It has been used for the last two years, and has proved perfectly satisfactory. The lumen is sufficiently large to prevent its being obstructed. It is easily kept in place by means of the shield and the tape. Flexible and soft of texture, its presence never gives rise to pain or irritation. The portion projecting in front of the shield enables one to attach a rubber bag for collecting the drainage. In lieu of such an appliance I have generally preferred a cushion of oakum to receive the pus as it drains away through the tube. The manner in which the shield is joined to the tube allows the latter to rest in the groove or angle formed by the junction of the diaphragm to the thoracic wall, which facilitates the drainage and renders it more complete. It is simple, cheap, easily adjusted, efficient, and so far my own experience, and that of friends who

have resorted to its use, would indicate that it is the best means of maintaining permanent drainage in suppurative pleuritis. In no case where it has been used was it necessary to make a counter-opening, as it always gave free exit to the pus and allowed the utmost facility for washing out the pleural cavity.

LOUISVILLE.

ON THE TREATMENT OF WOUNDS.

BY W. W. VINNEDGE, M. D.

Few subjects are more practical or more important than that of wound-treatment. The frequent hurried calls to responsible duties growing out of injuries of this class are so common in the experience of every practitioner of surgery that questions connected with it can not receive too frequent or too earnest attention. The Surgical Section of the International Medical Congress, during its late session in London, declared its importance by giving a whole morning to the consideration of the means best calculated to secure the primary union of wounds.

It is safe to assert that wound-treatment is the uppermost question in surgery at the present time. Manipulative skill, Mr. Erichsen has said, is almost perfect; so that surgeons are very well agreed as to rules of practice, but on the subject of the best management of wounds there exists great diversity of opinion. These differences have grown out of the attempts and failures of surgeons to secure for their wounded patients union by first intention and the presence and dangers of suppuration. This result, it need scarcely be stated, greatly reduces the complications to which a patient is exposed by the presence of a wound healing by the slow process. Some surgeons—such as Messrs. Savory and Gamgee—make it their aim to carry out three cardinal principles of wound-treatment as far as possible in their practice, and then by simple means prevent the other ills to

which their patients are exposed. They urge that large wounds should be treated in a great degree like simple wounds: that the parts, not the edges alone, should be adjusted with the greatest care, and retained in that position, with perfect rest secured, while the fluid exuded into the interstitial spaces should be drained off and received into some kind of dressing in which its decomposition is prevented. Another school of surgeons, headed by Mr. Lister, while not professing to neglect the principles named, and believing that decomposition and the formation of pus is due to the presence of germs in the atmosphere, exert themselves to the utmost to prevent through the use of remedies and dressings these germs from coming into contact with wounds.

Although differing as to methods and measures, surgeons are agreed that the office of the practitioner in wound-treatment is to secure primary union and thereby avoid the presence of pus altogether. Can this be done, and if so, what are the best means of securing it?

Wound-treatment can be best studied by a glance at its history, since the introduction of anesthetics—since the death of Liston in 1847. About this date, both Mr. Liston and Mr. Syme thought and taught that the water-dressing was the perfection of treatment of wounds. And so it certainly was, compared with the other methods of treating incised wounds that were generally adopted by their contemporaries. It was the perfection of lightness compared with a poultice, the perfection of cleanliness when compared with ointments often irate or rancid. But it would be unfair, if not unjust, to contrast the views of Liston and his contemporaries with the improvements and doctrines entertained to-day. To be convinced of this one has but to reflect on the great advance made in physical science since their day. It may not be uninteresting to describe Mr. Liston's method of using the water-dressing as detailed by his pupil, Mr. Erichsen.

"After the operation was finished the cut surfaces were deluged with cold water, so as to wash away all coagula, etc. A

large piece of wet lint, doubled, was then placed between the flaps, which, being laid down, were covered with another large piece of doubled lint soaked in cold water. The stump was then put upon a pillow, exposed to the air and left quiet, though wetted from time to time for six hours. By this time all oozing had ceased and the cut surfaces were '*glazed*.' The lint was then removed from between and upon the flaps; if any vessel started bleeding it was immediately secured, and the '*glazed*' and nearly dry surfaces were carefully brought together and supported with strips of isinglass plaster. A slip of wet lint was then placed along the edge of the wound, and the stump laid at rest on pillows, but without any covering except that afforded by the sheet thrown over a cradle. In this simple way the most favorable results were obtained—that is, primary union—so that this desirable object is not a modern invention."

On the "glazing" of the wound—the coagulation of the liquor sanguinis over the cut surfaces—Liston laid great stress. But the introduction of anesthetics led to a change in this method of dressing wounds. From a natural and humane desire to spare suffering to their patients, surgeons, instead of waiting for the "glazing" to take place, put up the wounded surface on the operating-table while the patient was insensible to pain. The result of this course was often disastrous, for at that time methodical drainage of wounds was unknown. In those days surgeons used to trust to apertures between the sutures and to the strings of the ligatures to act as conduits for the escape of blood-oozing, or of that sanguineous ichor which is always freely furnished by a recently cut surface, and the retention of which in wounds is now known to be productive of the worst results.

It remained for Chassaignac to invent and press most forcibly upon the attention of surgeons that, as Mr. Erichsen terms it, "most invaluable instrument, that which is the basis of most modern methods of treating wounds," the drainage-tube. The introduction of this instrument into practice worked a real advance in this department of surgical practice; it made it pos-

sible to put up immediately a large operation wound without the usual fear from retained blood or ichor.

More recently, based upon Pasteur's theory of germs, the antiseptic method of Prof. Lister for the treatment of wounds has been, and is now, prominent in the minds of thinking men in the profession. This school of surgeons—they are so termed—is so impressed with the evils attending the decomposition of retained fluids, and tracing such decomposition to the influence of minute organisms from without, that they concentrate their attention—in some cases their sole attention—upon the prevention of the access of these germs to wounds.

It is generally conceded that the progressive steps by which Professor Lister has advanced his antiseptic method, since he first promulgated it, have all tended in the one direction, namely, the attaining for his wounded patients greater immunity from accidents. In the expedients he has adopted to secure this advantage he has met with a degree of success which at once challenges our respect and admiration.

Then the indirect benefit which the introduction of the antiseptic system has effected is much greater than even its actual use has brought. For all surgeons now, both in hospitals and private practice, pay far more attention to the dressing of wounds, to cleanliness, to unnecessary exposure; while the value of carbolic acid as one of the best antiseptics has become generally recognized. Carbolic acid is a power over organic substances, and I have no doubt it does render inert minute organisms that may be deposited on or about a wound. In view of its value and cheapness it is, if a good preparation be selected, the best general remedy in use for wound-dressings.

But an important fact should be borne in mind in the employment of this agent in the treatment of wounds, namely, that while it possesses the power to prevent decomposition and the formation of pus, it also possesses the power to do harm. Carbolic acid has done much good, but its use has been attended with so much inconvenience, and in some few cases, peril, that at this time even Mr. Lister is casting about for a good substi-

tute for it. Thus a very careful adjustment of means to ends is required, for carbolic acid has not yet been assigned, through experience and observation, a fixed place in surgical practice.

I have purposely called attention to the use of carbolic acid before discussing other measures of wound-treatment, since those of us who have confidence in it as an antiseptic are expected to use it over a surface, either in solution or in a spray, as a precaution before making a wound, or, if a wound be made, as an early measure of treatment. As soon as bleeding has been controlled, about the first care of the attendant, especially if he be called to treat a large wound, is to provide for drainage. Drainage alone, says Mr. Erichsen, is all that is needed to place most wounds in the most favorable condition for healing. Wounds can not be cured, but they will heal readily if not tormented by meddlesome surgery. And methods of the most opposite character appear to owe their success to the fact of drainage being the one essential element that is common to all. The antiseptic method of Lister, by which every germ is excluded by spray and coverings, and the "open air" method, in which a wound is left open to all that which the atmosphere may chance to deposit upon its surface, differing as they do most absolutely in the theory on which each is founded, appear in many operations to be about equally successful in practice. This success seems to be due more to the one condition common to both, perfect drainage, than to those accessories in which they are so dissimilar. For whether drainage be effected by a tube or by the free escape of fluids without the use of instruments matters nothing, provided only it always be complete. To these practical and important statements by one who justly stands high in the profession, I will furnish the clinical notes of a few cases, in order to further illustrate the importance of the observance of this principle of practice.

On the 12th day of April, 1881, Mr. —, a freight conductor, thirty years old, weighing two hundred pounds, while switching off a car near Logansport, fell in such a way that two truck-wheels passed over his left knee-joint. Surgeons of

Logansport were summoned, and after reaction was established the patient was anesthetized and amputation through the lower third of the thigh was done. Three hours after the operation—midnight—the wounded man was transferred to his home in Lafayette, and on the following day I was called to attend him. The flaps, antero-posterior ones, were white and neatly approximated by interrupted silk sutures, while the free ends of the ligatures securing the blood-vessels protruded from the center of the stump and were turned upward in front and secured by a bit of adhesive plaster. No drainage had been provided for. The tourniquet, holding a roller over the femoral artery, was in position when the patient came into my care. I unloosed the tourniquet band to the full extent of the screw, but to quiet the apprehensions of the patient as to secondary hemorrhage allowed it to remain in position several days. On the third or fourth day a slight excoriation was discovered in the gluteal fold, and the tourniquet band was slipped down the thigh without being otherwise changed.

On coming to Lafayette, the patient's limb had been first redressed by a homeopathic physician, and when I began the care of the case only a few loosely applied bandages were in place over the stump. I therefore dressed from the beginning by the open method. From a thin feather bed the patient was placed on a hard mattress, and clean dry sheets placed under his body twice daily. The stump was washed with care frequently every day, and inclosed between times with clean carbolized wrappings. Traumatic fever had quite subsided by the ninth day, and the patient slept without the help of anodynes. On the third day after the accident I divided one of the central sutures holding the flaps together in order to favor drainage. The case progressed fairly well until the eighteenth day, when, without the warning of a chill or rigor, an abscess was detected in the stump between the flaps. On the following day there was a free discharge of pus from the wound, the edges of which had united. This wound, in a large, fat thigh, was fully four months healing by the slow process of granulations. I think a drainage-tube

would, with the other measures of treatment used, have prevented much if not all this danger and trouble.

On the night of March 11, 1879, G. W., fireman, married, apparently twenty-four years old, while engaged switching cars in Logansport, had his right leg crushed up to the knee-joint by a locomotive, and when I reached Logansport, about two and a half hours after the receipt of the injury, amputation had been done through the junction of the lower and middle thirds of the thigh, and the stump dressed by the use of adhesive plaster and rollers. The day following the patient was removed to his home in Lafayette, and I gave the after-treatment. This patient wore Esmarch's tube lightly about his injured thigh as a measure of safety in case of secondary hemorrhage. Surgical fever was comparatively slight, and the patient after the first few days improved very well. But about the fifteenth day an abscess was discovered in the stump near the end of the divided bone. It was not large, but it was a complication that a drainage-tube would almost certainly have prevented. After this accident the patient made a good recovery.

Mr. Lister's own words of instruction as to the application is as follows: "Drainage is provided for by India-rubber tubes. In a large wound or abscess I use one as big as my finger, and in smaller collections of matter tubes proportionately small. In order to prevent the tube from being pushed in too far, we have two loops of carbolized silk attached to the orifice, each of them knotted at its extremity. The orifice of the tube is placed on a level with the skin, and when the dressing is bound down it gets a purchase on these knotted pieces of silk stretched upon the skin, and so the tube can not leave its position. If the direction of the tube has to be oblique we cut the orifice obliquely in proportion, so as to have it perfectly level with the surface. If the tube projects it gets bent and fails to convey the discharge properly. The opening in the skin is made merely sufficient for the admission of the tube. The tube does far better than a free incision in a large abscess." The size and character of the wound determine the size and direction of the instrument.

In the order of dressings the next question which presents itself is, shall the coverings of the wound be dry or moist? On this question too surgeons differ widely. In this connection I may briefly report a couple of cases.

On the 30th day of March, 1881, J. H. F., fifty-seven years old, of Tipton, Ind., started to Kansas in a box freight-car, some horses being under his care in the car. At Dayton, Ind., while passing over a bridge, a part of the structure gave way and his car and others were thrown into a creek, a distance of fifteen feet. Besides a fracture of the right clavicle and bruises, F. suffered a severe wound through the right eyebrow, turning back a V-shaped flap, one inch and a half in length, through the right temple and cheek. Three hours after the accident I dressed his injuries in Lafayette. The wound was carefully cleansed by sponging with warm, carbolized water, and the flap returned to and maintained in place by ten interrupted silk sutures. Next I applied a clean compress of old muslin, four double, which had just been squeezed moderately dry out of a solution of carbolic acid, glycerine, and water (1-40); over this a dry compress made from the same material. These simple dressings were held gently but firmly in place by a few turns of the roller. On the fourth day the dressings were removed for the first time; there was no pus; the sutures were moistened and removed and fresh dressings applied, as before. These remained in place three days and were then removed permanently, the wound having healed.

On January 11, 1881, T. S., apparently 35 years of age, a switchman of the Lake Erie & Western Railway, while in the act of "throwing a switch," fell off a bridge into the bed of what was formerly the Wabash & Erie Canal, which at that date was covered with ice. He fell about twelve feet, alighting on his right shoulder, face, and head. Among other injuries received was a vertically incised wound, two and a half inches long, in the right temple. About half an hour after the receipt of the injury I cleansed it with warm carbolized water, and closed it up with six silk sutures, dressing with soft muslin compress previously

immersed in a weak solution of carbolic acid. Gentle pressure was maintained by the roller. The dressings were reapplied on the fourth day, moistened by the antiseptic solution as often as moisture gave comfort to the patient. After twenty-four hours the dressings were allowed to become dry and remain so. On the fourth day the dressings were reapplied for the first time. The wound had united without any suppuration. I removed the sutures, and on the seventh day dismissed the case.

For simple incised wounds, as in the above cases, the modified antiseptic dressing of Lister has in my hands been most satisfactory; but in large wounds, as in amputation for instance, especially in patients of low vitality, or who have been exposed to much cold, a more rational procedure it seems to me would be the drainage-tube and an antiseptic dressing which would maintain better coaptation of the parts and a more uniform temperature than muslin compresses would. Thos. Chestnut, M.D., of Lafayette, an experienced physician, says that cotton batting which has been boiled in a solution of caustic potash, dried, then treated with a solution of carbolic acid and dried again, will, if applied and supported by pasteboard or binders' board and a roller, fulfill this indication, but a more convenient and exceedingly useful dressing is "marine lint."

An essential element in the successful treatment of wounds is a dressing that will hold the clean-cut surfaces in exact apposition, and keep the parts at rest and free from all disturbance until union has occurred. It follows therefore that a proper amount of pressure is a powerful and beneficial agency. It favors union by maintaining accurate coaptation and prevents extravasation of blood and its products. When such extravasation has occurred pressure is the quickest, the least painful, and the most successful agency in promoting its absorption. John Bell wrote: "The steady firmness with which you support helps the adhesion, prevents suppuration, and hinders an afflux of blood to the parts." The well-known illustration in the text-books of the boxing-glove gangrenous hand of the boy whose fore-arm was too tightly bandaged by an ignorant man has, Mr.

Gamgee thinks, done much harm by preventing the methodical and rational use of pressure.

It has already been stated that wounds can not be cured, and that they will heal readily if the dressings are not disturbed too often. In other words, the wounded part should have proper position and absolute rest. Rest and position as therapeutic agencies, carried out with all the resources and precision of surgical mechanics, are invaluable helps in the management of this class of cases. In the vast majority of wounds, coaptation carefully effected and steadily maintained is followed by union, and that more frequently by the first intention than under any other treatment.

From the foregoing, and from much which must remain unsaid in a paper of this length, I think the following conclusions are warranted :

1. That the improvement which has taken place in the treatment of wounds is striking. That the manner in which the healing processes are secured in lesions of surface, even when most extensive, by Listerism and its modifications, bears strong testimony to the value of patient investigation and enlightened observation of the vital forces at work in the healing of wounds.

2. That carbolic acid is, in the existing state of surgical science, the best remedy in the general treatment of wounds.

3. That drainage, without regard to the means, provided it be complete, is essential to the highest success in wound-treatment. Especially is this true of large wounds, as in those made in amputating the breast or the extremities.

4. Continuous but gentle pressure is another important factor in the management of wounds, acting by controlling the local circulation, preventing extravasation and interstitial deposits, and lulling muscular spasms.

5. The value of rest as a therapeutic agent is of great importance, and, to be of most benefit, must as nearly as practicable be *absolute*, free alike from unnecessary dressings no less than other disturbing agencies.

RETINOSCOPY (KERATOSCOPY).

BY R. MAUPIN FERGUSON, M. D.

While attending the clinique of Dr. Galezowski in Paris, but more particularly at Moorefield's Ophthalmic Hospital in London, I became acquainted with this method of determining the refractive condition of the eye. This method of examination was first systematized by Dr. Cuignet, of Lille, who introduced it under the name of *keratotomy*. The term retinoscopy—proposed by Dr. Parent, of Paris—is, however, to be preferred as being more appropriate than that of *keratotomy*.

Retinoscopy can not take the place of the ordinary tests with glasses and ophthalmoscope; and as its results are more or less approximative, it must ever occupy a subordinate position. The facility with which it can be exercised is, however, such that it is a method deserving more general recognition. In a few moments, and by a few slight rotatory movements of the mirror, without questioning the patient, and without the use of glasses, the state of refraction in the different meridians may be determined, thus indicating E., M., H., or As. Probably the greatest service which retinoscopy renders is in the detection of As., revealing the axes and determining the character of the astigmatism, whether it be myopic, hypermetropic, or mixed astigmatism. This alone is sufficient ground for its recommendation. After determining the refraction in the ordinary way by means of test-glasses or ophthalmoscope, we can by this method, placing the glasses before the eyes, prove the completeness or incompleteness of the correction. Like the ophthalmoscopic examination, it renders us independent of the answers of patients, which for various reasons are not always accurate or reliable. It is not claimed that by retinoscopy any thing can be done which can not, as a rule, be done by other means, and even with a somewhat greater degree of accuracy; but in its simplicity in practice, the certainty of its indications,

and the amount of time it often saves by putting us at once on the right track, sufficient advantages are presented to entitle it to rank as a most useful aid.

Before the terms keratotomy or retinoscopy had ever been used Mr. Bowman had mentioned in a foot-note to Donders (page 490, edition 1864) that he had been led to the detection of astigmatism by using the ophthalmoscopic mirror in just the same manner as in detecting slight conical cornea. There are, however, no evidences that he ever used this method excepting to determine As. The honor of having systematized the method belongs undoubtedly to Dr. Cuignet, of Lille, who was the first to give a full description and explanation of the various phenomena. Dr. Parent, of Paris, in the *Recueil d'Ophthalmologie*, 1880, discusses the subject with great minuteness, showing the inappropriateness of the name keratotomy, and that the movements of the light and shadow depend not only on the refractive condition of the eye, but also on the character of mirror used, and the distance between the observed and the observer's eye. By always using a mirror of the same curvature, and by always sitting at the same distance, the phenomena are made to depend entirely on the refractive condition of the eye. An excellent article on this subject is to be found in English in Morton's *Refraction of the Eye*.*

In conducting retinoscopy the patient sits as usual for an ophthalmoscopic examination. The eye under examination should be protected from the direct light of the lamp by means of a shade or the hand of the patient. The eye should be so directed as to bring the optic disc behind the pupillary area. It is preferable to have the pupil dilated with atropine, though this is not essential, as generally it remains of sufficient size, the light from the concave mirror not being very intense. Unless the accommodation be paralyzed by atropine, we are liable to be deceived just as in any other method of examination; but ordinarily the results may be relied upon if the examination be conducted in a dark room and the patient fix a point twenty feet

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distant. The observer sits at a distance of 1.25 m., and uses a concave mirror with focal distance of 20 cm., which will focus the light from the lamp 1.50 m. distant at a somewhat greater distance, say at 25 cm. from the observer and 1 m. from the observed eye.

If the observer is not emmetropic, he should correct his error of refraction by placing the proper lens in a clip behind the central opening of the mirror. The mirror is held to the brow and the light thrown into the eye under examination. In the pupillary area will be seen the bright reflex and a shadow more or less marked. By causing the mirror to execute slight rotatory movements on its horizontal, perpendicular, and intermediate meridians, the reflex and shadow will be seen to make certain movements; and by the rapidity of movement, direction of movement, brightness of reflex, and density of the surrounding shadow, we are enabled to determine the condition of refraction and approximate the degree of ametropia, if any exist.

The light from the lamp falling on the concave mirror will be brought to a focus at about 25 cm. from the observer's eye, and then diverging from this point, which is situated 1 m. from the observed eye, will illuminate a greater or less area on the retina according to the refractive condition of the eye. If there be M. of just 1 D., the rays will come to an exact focus on the retina, there forming the smallest and brightest area surrounded by the densest shadow. The further the refractive condition departs from this degree of ametropia, the larger will be the circles of diffusion upon the retina, and the illuminated area will be larger, less bright, and surrounded by a less dense shadow. The movement of this illuminated area over the retina is in *all* conditions of refraction, provided a concave mirror be used, in a direction contrary to that of the mirror. The illuminated area is, however, seen through the refractive media of the eye, and these exert an important influence on the direction and rapidity of movement and on the degree of luminosity of reflex and the density of shadow. The nearer the eye approaches to E. the more enlarged is the image of the illuminated area, and the

more rapid will be the displacement of the reflex and shadow corresponding to the movements of the mirror. The illuminated area will be very bright in E., but owing to the high degree of enlargement the line where light and shadow touch will be less well marked in the image, and there will be greater difficulty in determining the direction of its movements.

Although the boundary between light and shade is not so well defined upon the retina in high degrees of ametropia as in E., yet owing to the slight enlargement of its image, which we observe through the dioptric ocular media, it appears darker and more distinct than in E. As the enlargement in high degrees of ametropia is slight, so is the displacement of light and shade correspondingly slow. In E., and the conditions approaching it, the enlargement is so great that the small portion of the circle formed by the juxtaposition of light and shade, visible in the pupillary area, will have a somewhat linear character. In high degrees of ametropia so much of the light and shadow may be seen that the latter will present a somewhat semilunar shape, and in very high degrees may even form a complete circle around the reflex.

It is, however, the movements of the light and shadow which can be most easily detected, and to which the greatest importance is attached. If the rays of light from the illuminated retinal space upon emerging from the eye do not cross before reaching the observer, an erect image will be seen which will move in the same direction as the illuminated retinal area, i. e. *contrary* to the movement of the mirror. Thus, if the mirror be moved from left to right, the image will go from right to left. It is evident that the rays do not cross in front of the examiner in either E. H. or weak M. If the rays *do cross in front* of the observer, an inverted image will be seen, and it will move in a direction opposite to that of the illuminated retinal area, i. e. in the *same* direction as the mirror, both mirror and image going from right to left, or *vice versa*.

In M. of 1 D. the image will be 25 cm. from the observer's eye, and, with normal accommodative power, can easily be seen,

and in all higher degrees of M. the image will lie still further from the observer's eye. From what has been already stated the following conclusions may be drawn:

If in every meridian the reflex and shadow move in the *same* direction as the mirror, and with equal rapidity, there is simple M.

If in every meridian the reflex and shadow move in the *opposite* direction to the mirror and with equal rapidity, there is either E. H. or weak M. (< 1 D).

If in meridians at right angles to one another the reflex and shadow move in *different* directions or with *different* degrees of rapidity, there is astigmatism.

If the reflex is very bright and the shadow difficult to detect, but nearly linear and traversing the pupillary area very rapidly in a direction contrary to the motion of the mirror, there is E. The indistinctness of the phenomena form the most important distinguishing feature of E. The *slower* the movement the *higher* the ametropia; the more *rapid* the movement the *nearer* to E. When there is mixed astigmatism the movement will be "*with*" in one meridian and "*against*" in the meridian at right angles to it. In simple and compound myopic and hypermetropic astigmatism we will have a combination of the symptoms of E., M., and H. in the different meridians. As we have seen when the movement is opposite, there may be E. H. or weak M. To determine which of these conditions is present, we place a convex 1 D. in the spectacle-frame before the eye. Now, if it moves in the *same* direction, he must be emmetropic or myopic. Replace the + 1 D. by + .50 D., and if it still moves in the *same* direction he is myopic; for were he E. the + .50 D. would cause the rays to converge to a point 2 m. distant and behind the observer, and consequently he would see the erect image moving in the *opposite* direction to the mirror.

By means of trial lenses set before the observed eye the error of refraction may be determined quite closely. For instance, the light and shade move "*with*," then there is M. With a -4 D. it still moves "*with*," but with -5 D it moves "*against*,"

then there must be $M < 6 D$; for were there M . of $6 D$., and we gave a $-5 D$., the inverted image would be formed at a distance of $1 m$. from the observed eye, and would be seen to move in the *same* direction. There is, then, M . between 5 and $6 D$.

In H . we add in the same manner *positive lenses* till we find the weakest glass which causes the image to move in the *same* direction. Then we know we have produced artificial M . of at least $1 D$., and the degree of H . will be about $1 D$. less than the number of the glass required to produce this effect.

If there be astigmatism, the error in the various meridians may be determined in the same manner by the use of cylindrical glasses combined with spherical, if necessary.

As Dr. Parent has shown, the movement of the illuminated area on the retina is in the *same* direction with the mirror when a *plane* mirror is used, and then the movements of the image would be just the opposite of those produced by the concave mirror.

All these various phenomena may be conveniently studied by means of a convex lens, say of $2 D$., and cylindrical lenses placed at various distances from a screen, to represent the various refractive conditions. In front of the lens should be placed a perforated diaphragm to represent the iris and pupil. Then by proceeding as has already been described the phenomena of E . may be studied when the lens is placed at its exact focal distance from the screen, H . when within and M . when without this distance. By proceeding in the same manner with cylindrical lenses all the various forms of astigmatism may likewise be studied.

LOUISVILLE, KY.

EXTERNAL URETHROTOMY FOR REMOVAL OF IMPACTED CALCULI, WITH A CASE.

BY FAYETTE DUNLAP, M. D.

During the spring and summer of 1879 A. F., a lad aged eleven years, had frequent attacks of what was thought at the time to be intestinal colic, or perhaps obstruction of the biliary passages. He was relieved by anodynes, and soon returned to his accustomed health, though his parents had noticed that after each passage of urine a varying quantity of thick, glairy mucus was voided. He lost none in flesh or strength, however, but regularly attended school. In January, five or six months after his last paroxysm, I attempted to empty his distended bladder, but found the meatus obstructed with a firmly-fixed calculus, and the passage completely occluded. It was lodged just at the junction of the membranous with the spongy portion of the urethra, the parts swollen and very painful. It was impossible either to force it back into the bladder with manipulation or with a solid catheter, or to bring it forward, though a pretty firm grasp could be made on it with a pair of long, slender forceps.

He was placed in the lithotomy position, and an incision made down upon the stone, which was then easily removed through the opening. Just behind it were three smaller ones with sharp, jagged angles, and pretty firmly fixed in the tissues. Passing a Thompson's searcher into the bladder, other calculi were detected, apparently of small size. The parents would not give consent to lithotomy, and the incision was closely stitched over an English catheter, and this left in the bladder twenty-four hours. The wound united promptly, and examination three months thereafter failed to find any narrowing of the urethra. The flow of mucus continued uninterruptedly, and often the urine would be suddenly checked, but change of posi-

tion—getting on the hands and knees, lying on the back—would allow it to begin again in a natural stream.

I insisted on lithotomy or lithotrity, but the parents insisted on a postponement. The paroxysms of pain in the loins, along the course of the ureters, as frequently on one side as the other, would occur at intervals, and would suddenly subside under ether or opiates. One month from the time of the first urethrotomy retention again occurred, and a number of calculi were discovered tightly imbedded in the urethra in the same position as before. The same attempts as on the other occasion were made to dislodge them, and again a linear incision was made down upon the mass of fine small stones. Some very ragged, and the others smooth, were removed. One of the smooth stones was crushed, and its nucleus found to be a small, compact, uric-acid formation, and the covering a deposit of the urinary salts. Each stone had a number of facets, evidently having undergone pretty constant trituration in the bladder.

The searcher detected others still in the bladder, but any further interference other than for temporary relief was stoutly resisted by the parents.

I have neglected to mention that at times small calculi, as large as duck-shot, were passed without difficulty, and on one occasion quite a number. The boy now became quite reduced, did not increase in weight or size, and had an aggravated cystitis, the channel frequently blocking up with the secretion and refusing to admit a Nèlaton catheter. The various remedies named in our therapeutics supposed to have an influence in preventing the formation of renal calculi were assiduously tried in time, with no impression whatever, and careful attention given to the manner of living and character of food. The general condition occasionally showed improvement, but it appeared that a serious impression was being made by the constant drain by the cystitis. Careful search was made for any evidence of kidney degeneration, but none was ever found.

On March 30, 1882, fourteen months after the last operation, retention again occurred from impaction of stones, this

time just without the entrance of the bladder in the prostatic portion of the urethra. In the lithotomy position I cut down upon a grooved director passed down to the calculi quite to the prostatic region. The large stones, as large as buckshot, were removed. The incision was necessarily a large one, and in order to search for remaining stones the sound was again introduced and careful investigation made, but the bladder was found to be free of them. I left an English catheter in the urethra, and stitched the incision around it, removing it in thirty-six hours. The next urination was accomplished without difficulty. After several washings with carbolyzed water the mucus and pus ceased to flow and to all appearances the formation of calculi has stopped, and the health of the lad markedly improved. The mother estimates that thirty or forty stones have been passed, eleven of the number being removed by urethrotomy. A number ten sound can be dropped into the bladder, there being no evidence whatever that a stricture has resulted from the repeated incisions. The case has been of interest to me from the unusual number of calculi being formed and from the impunity with which we can deal with the male urethra without a permanent narrowing of its channel. Aside from the incisions the mucous membrane was rasped and torn by the endeavors to remove them, and more by the sharp, jagged projections of the stones themselves.

DANVILLE, Ky.

Reviews.

Chronic Bronchitis: ITS FORMS AND TREATMENT. By J. MILNER FOTHERGILL, M.D., Edin., Member of the Royal College of Physicians of London, Senior Assistant Physician to the city of London Hospital for Diseases of the Chest, &c., with numerous illustrations. 1 volume. 8vo. Pp. 160. New York: G. P. Putnam's Sons. 1882.

. Bookmaking is an art, and Dr. Fothergill is a master of this art. To but few among the legion of authors is accorded the distinction of having written even one good book; Dr. Fothergill has given us not only one, but several excellent volumes. His previous works have been remarkable for the thorough mastery of the subjects treated of, clear insight into the needs of the general run of professional readers, and great judgment and skill in working up his materials.

The present volume bears a strong family resemblance to its numerous predecessors which have emanated from Dr. Fothergill's facile and fertile pen. It possesses many of their merits and shares with them the faults necessarily attendant upon hasty writing. There is a limit to the productive capacity of even the most active and original minds, beyond which they may not venture without deteriorating in their work. In other words, very prolific authors reach a stage in their literary career when, in the judgment of the public, they have *written themselves out*. It is to be hoped that Dr. F. will not impair his great powers for usefulness as an author by galloping his pen too hard. And really, in all kindness be it said, the present volume, though in many respects a valuable contribution, furnishes some ground for fears that he is doing this very thing. The pages groan with the same old formulæ that are so familiar

to the reader of his earlier works. Almost all the illustrations are borrowed, and as most of them are taken from Da Costa they are old acquaintances, at least of American readers.

In one of his prescriptions he recommends the combination of one third of a grain of morphia sulphate with *one thirtieth* of a grain of sulphate of atropia. Isn't this more of the latter drug than is either necessary or desirable?

Some of the faults which lessened the pleasure and profit derived from a perusal of his earlier work appear in an aggravated form in this volume. An awkward and inelegant style may be overlooked, but inaccuracy and obscurity of expression are inexcusable. This book is disfigured by many bungling and involved sentences difficult of comprehension, and by flagrant violations of the rules of English syntax.

On page 16, "and consequently the lung tissue *has its* elasticity impaired." Such redundancy is very objectionable. Would it not have been just as easy to say, "and consequently the elasticity of the lung is (or becomes) impaired?"

On page 18, "The bronchial mucous membrane is swollen, turgid, and irritable." Turgid means swollen and nothing else.

On page 21 one reads: "Allied in its physiological explanation to this movement of the chest-walls is the phenomenon of the effect of lying down." To say the least of it, this is neither graceful nor clear. The reader is not told what peculiar phenomenon is the effect of lying down. The succeeding sentence conveys the information that, "Sometimes a patient can only lie on one side; sometimes by preference on the back." What the author means to say is probably that "sometimes a patient can lie only on the side, at other times the patient prefers to lie on his back."

On pages 40 and 41 is found the following sentence: "I make this quotation not so much for the sake of the last observation, which has attracted much attention, as for the antagonism between bronchial dilatation and pulmonary phthisis, as did also Rokitansky's view of the antagonism of mitral disease to pulmonary phthisis—which has also been the subject of much

thought—or of the attempts at cure founded thereupon, of which only the echo remains, but rather for the practical value of the preceding remark, in pointing out the lines upon which our treatment should be conducted in the view of these resultant sequelæ, in order to be successful in affording relief for our patients.” What a night-mare of a sentence! There certainly can be no excuse for inflicting such a jumble of words upon his readers, among whom few will be found with either patience or leisure to work their way through this labyrinth of words. Immediately following this remarkable sentence, extending over a quarter of a page, is another, in which he says: “The careful study of Rokitsky’s accurate account of pathological conditions in my later student days, giving me an acquaintance with morbid changes far beyond what was usual in student days, at that time at least.” From this it would appear that Dr. Fothergill’s “later student days” were characterized by certain pathological conditions of which Rokitsky has given an accurate account. The reader naturally looks for some reference to volume and page in his works where it may be found, and regrets Dr. F. does not give it. It is but natural that these pathological conditions of his later student days should have given him “an acquaintance with morbid changes far beyond what was usual in student days, at that time at least.” In the next edition of his book the author should give a more particular account of his pathological conditions, or else reconstruct this sentence so as to properly express his meaning.

On page 111 the author says, “The chronic bronchitic *is* apt to tarry on the night-stool, for expulsive efforts are trying and fitful with *them*.” The noun bronchitic is here used in the singular number, the verb immediately succeeding and governed by it being in the singular; yet the pronoun *them* in the same sentence refers to the same subject. To couple a verb in the plural with a noun in the singular is a blunder so gross that its perpetration by a professional and professed book-maker is simply inexcusable.

“One good patient I lost from going out of the hall-door to

make water after dinner." Why, we ask, should the performance of so natural and necessary an act have cost the author so dear—the loss of a *good* patient? Was there any thing objectionable in the time? Post-prandial micturition is as natural and proper as matutinal or nocturnal micturition. Perhaps it was the place! The hall-door is a place rather ill-chosen for such a performance. In the sentence which follows the mystery is cleared up, and one learns that it was not the doctor who went out to make water, but the patient. The latter, it appears, lost his life in consequence of the exposure to the cold air, and the author commemorates the event with this effort at metaphor: "He gave way to the impulse (to void his bladder), and the sands of life ran quickly out as an outcome thereof." When the sands of life run out of a man's bladder the outcome is bad enough, and it might indeed be called the worst form of gravel.

On the same page he says: "The phlegm is loose, to use the popular expression; it is easily expectorated, and is frothy or a thin, watery fluid *approaching* (!) the rheum known as bronchorrea." Now Dr. F. evidently means that this thin, watery fluid *resembles* the rheum known as bronchorrhea, but he ought to know that *resemble* and *approach* are not synonyms, and that the use of the verb approach in this sense is neither elegant or correct.

In giving an explanation of the fact that no particles of iron were found in the lungs of needle-grinders who had died of the so-called needle-grinders' phthisis, he says: "They (the iron particles) are dissolved out by the action of the body fluids, *leaving* the insoluble stone particles *remaining* unaffected." It is mildly suggested that what is left remains, and conversely what remains is left. Most writers would have expressed the above simple fact in plain English, but it would really seem as if Dr. F. sometimes delighted in stringing words together without much regard to their meaning. Further on he speaks of fine stone-dust particles, as if dust were not always composed of fine particles, whether these be coal, stone, or any other substance.

On page 45 he writes: "It is scarcely *material* in a practical treatise to discuss the rival explanations of emphysema being

produced by 'inspiration' or 'expiration,' which are interesting only to pathologists and teachers in medical schools. Suffice it to say, it is produced when the respiration is forced or labored from any cause."

Even one who is not over fastidious would find fault with the construction of this sentence. The use of the word "material" in the sense of "appropriate" is most improper. Even in the sense of "important" it would not be a good expression. Then, is not a knowledge of the pathology of emphysema just as important to a practitioner of medicine as to pathologists and teachers in medical schools?

When the author writes, on page 46, that "local emphysema may occur in various parts of the *chest*," the reader may venture to suppose that he means local emphysema may occur in various parts of the *lungs*.

On page 63 it is stated, "As winter approaches, the cold air within the larger air-passages sets up hyperemia with increased secretion from the mucous membrane, which is known popularly as 'winter cough.'"

Hyperemia with increased secretion of the mucous membrane may *give rise* to what is commonly called "winter cough;" but the author is certainly wrong when he says that hyperemia is known either popularly or unpopularity as winter cough.

On page 111 the author proposes to briefly review the pathology of a "*bronchial attack*." As the nomenclature of diseases in use by the medical profession of the United States mentions no such disease, the author perhaps meant to say a *bronchitic attack*, or, what would have been still better, simply bronchitis. He next proceeds to give the pathology, or, more properly, the morbid anatomy of this so-called "bronchial attack." The reader is then told that "at first the mucous membrane is swollen and turgescer with blood." Such turgid expressions are not only in bad taste, but are nonsense. "Turgescer" is the present participle of the verb inchoative "turgescere," to begin to swell. When the mucous membrane is already swollen it is no longer *turgescer*, but *turgid*.

On page 114 the author describes a simple plan for a vapor bath, devised by the late Sir James Y. Simpson, and closes by informing the reader that in from twenty to thirty minutes a thoroughly free perspiration is *in full swing!!* Dr. F. ought seldom to indulge in metaphor, for in most of his attempts he recalls the man who whenever he opened his mouth put his foot in it. Besides, such a slang phrase, "perspiration in full swing!" is out of place in a scientific work.

On page 156 occurs a singular passage. It is characterized by unusual brevity. As the author says, in another place, it is "*brief but concise.*" Here it is: "*Woolen UNDERCLOTHING, DRAWERS, AND STOCKINGS ARE imperative.*"(!!!!) Is the reader to understand from this that drawers and stockings are not underclothing? Are they ever worn on the outside? What does the author mean when he says they are imperative? The frail wearers of very dainty stockings have been known to exercise imperative command over sturdy carls, with or without drawers; but, according to the author, the drawers and stockings themselves become imperative. Why not have written, Woolen underclothing is imperatively needed, or, The use of woolen underclothing is imperative. Perhaps that would have been too plain.

Nearly the whole of page 157 is devoted to that useful little appliance known as a "respirator," and among other things the reader is told that "especially is it desirable to wear it *where a southern residence is impracticable.*"

This means, *Anglice*, that those who can not have the benefit of a southern climate will find it especially useful to wear a respirator. The author ought to know that *where* is an adverb of place; *residence*, qualified by it, means the place where one resides—a dwelling, an abode—and not the act of residing. Impracticable means incapable of being practiced, performed, or accomplished.

When the author wrote that a southern residence is impracticable he wrote nonsense, just as much as if he had written "where a southern dwelling can not be performed or prac-

ticed." Furthermore, it is difficult to understand how wearing a respirator could benefit an impracticable dwelling, whether north or south.

It is not an agreeable duty to call attention to the errors and defects of an author, but it is none the less a duty which every reviewer owes to the reading public, no less than to the author and to himself. When a medical man, attracted by the title and the name of the author, buys a book and pays a good price for it, he has the right to expect at least that it shall have been written in correct English. An author who writes too hurriedly, is negligent of his style, and habitually violates the simplest rules of composition, is lacking in respect for his readers and trifles with his own reputation. Dr. Fothergill is too useful a man, and in his earlier works has shown himself too facile and instructive a writer, to be allowed "full swing" with a pen which has so soon grown careless, obscure, and inelegant, and which in the work under review has committed so many and such egregious sins against the great lexicographer. It is time the attention of Dr. Fothergill was called to his downward tendencies, that in other editions he may clear their pages of blemishes which no amount of lack of time on his part can be permitted to excuse.

The book contains five chapters: I. Introductory. II. The Objective and Subjective Phenomena. III. Pathological Relations. IV. Forms: See Asthmatic, Catarrhal, Cirrhotic, Emphysematous, Degenerative, Mitral, Gouty. V. Treatment.

These various topics are treated of in a practical and, in many respects, satisfactory way. The book on the whole is a valuable contribution to our current literature. The paper and typography are excellent and most creditable to the Messrs. Putnams.

Diseases of the Rectum: FISTULA, HEMORRHOIDS, PAINFUL ULCER, STRICTURE, PROLAPSUS, &c.; THEIR DIAGNOSIS AND TREATMENT. By WILLIAM ALLINGHAM, M.D., Fellow of the Royal College of Surgeons of England; Surgeon to St. Mark's Hospital for Fistula and other Diseases of the Rectum, etc. Fourth revised and enlarged edition, with illustrations. Philadelphia: P. Blakiston, Son & Co. 1882.

Mr. Allingham's work has now reached a fourth edition, and has been translated into the French, Italian, Spanish, and Russian languages. This may fairly be considered as entitling the book to rank among the classics. The second edition was an improvement upon the first, in that it omitted much that was controversial and all that was personally disagreeable. The next edition was an improvement upon its predecessor, in that it showed a better acquaintance with what had been done in the same departments of surgery in other countries and exhibited Mr. Allingham himself as having very quietly adopted certain improvements in treatment as derived from other surgeons. The edition under present consideration is a better work than that just alluded to. It contains none of the faults of the first issue, and may be justly said to cover most that is practical in reference to the management of diseases of the rectum. It will be a matter of surprise, however, to the American reader to find that Mr. Allingham dismisses the carbolic-acid treatment of hemorrhoids in so summary and curt a way. It is to be hoped that in another edition, which can not fail soon to be called for, the distinguished surgeon of St. Mark's Hospital will take occasion to acquaint himself with the use among American surgeons of this very trustworthy, very painless, and very sure mode of managing many cases of hemorrhoidal tumors. If the author himself has not time to do this, the publishers of the American reprint could readily find an editor who would embody what has been done on this side of the Atlantic in this direction, and in some others which have escaped Mr. Allingham's notice. This remark, though made to apply here to the work under notice, might very well be extended to cover reprints of all foreign

works which relate to the practical side of the healing art. And it is within the bounds of truth to add that the trans-atlantic author who, writing on any branch of practical medicine or surgery, fails to acquaint himself with what has been done by laborers in the same field in America, shall often omit something that is new and much that is valuable. A very striking instance in point is furnished by Mr. Bryant's book on Surgery, which, though of very great merit, confessedly one of the best practical guides in the language to students of surgery, has been much increased in worth by the additions of its American editor, Dr. Roberts.

The Physician's Memorandum Book. Arranged by JOEL A. MINER. Fifth improved edition, with clinical columns and ledger sheets. Ann Arbor, Mich: Joel A. Miner.

Walsh's Physician's Combined Call-Book and Tablet for 1883. Seventh edition. Published by RALPH WALSH, M.D.

The Physician's Visiting List and Diary for 1883. Louisville, Ky: GEO. H. DIETZ & Co., Publishers.

The Medical Record Visiting List, or Physician's Diary for 1883. New York: William Wood & Company.

One could not go amiss in selecting a visiting list from either of those above-named. Each has its advantages. The Ann Arbor List in that it has a table for respiration, pulse, temperature, in each daily record, with a list of diseases and the medicines used in their treatment.

Walsh's Call-Book and Tablet contains directions for making post-mortem examinations, with tables for monthly receipts and expenditures, debts (which let us hope may be small), borrowed, and loaned (which we trust may be fewer), &c.

The Louisville List possesses many of the good qualities of the others named, besides being a home institution. All three of the books are handy, of small cost, of great convenience, and may be had by writing to their several publishers.

The Medical Record List is small and compact, conveniently arranged, and unites both the call-book and ledger.

Clinic of the Month.

TREATMENT OF CARDIAC, HEPATIC, AND RENAL DROPSY.—D. J. Leech, M.D., F.R.C.P., Physician to the Royal Infirmary, Manchester, opened a discussion in the section on medicine, at the late meeting of the British Medical Association, with a paper on the above subject, from which we abstract the following:

It appears to me that the frequent dependence of dropsy on blood, nerve, and tissue-changes, has much to do with the difficulty often experienced in removing effused fluid. When the effusion arises chiefly from obstructed venous circulation, or from defective water excretion, the tissues being but little weakened, we may usually relieve or cure by the elimination of water; but we fail to do good by direct water-removing agencies in proportion as deterioration of tissues, altered blood, or weakened nerve-supply, jointly or separately, take the lead in the causes giving rise to dropsy.

In the earlier stages of heart-disease with anasarca, for example, diuretics may succeed admirably; later on, as the general health fails, they lose their power, even though there be no evidence of increasing obstruction of the circulation; and at last it sometimes happens that we can not drain the water from the edematous tissues, even when they are pricked or tapped; much less can we remove it by inciting the kidney, skin, or bowel action. We can, indeed, no more remove fluid from the tissues by these means than we can drain a soaked sponge by a trocar.

It is true that the kidney and heart structures are involved in the general tissue-degeneration of advancing disease; and hence, as time goes on, they answer to the whip less readily than in the earlier stages, and that this in part accounts for the frequent failure of digitalis and diuretics in long-standing dropsies; but another and probably more common cause of this failure is consequent upon the important part which tissue and blood-changes and weakened nerve-supply then play in the production of dropsy, and can not in many cases succeed.

Now, the routine and continuous employment of eliminants of

water where no good result can follow, from the very nature of things, is an evil. It can not be that the useless administration for long periods of squills, juniper, and potash salts, of jaborandi, jalap, and elaterium, is devoid of injury; and the injury is the greater since, during the employment of such agents, tonic and nutrient treatment is commonly neglected. We can not, of course, always decide as to the possibility of success from the use of water-eliminants. In the aged—in those whose nutrition has been rendered defective by prolonged disease—they are usually of no service, and in more promising cases we at times find them fail. In doubtful cases they must be tried; but a short trial of the leading remedies soon allows an opinion to be formed of the value of eliminators of water. These failing, it is, I believe, better to fall back on tonics and nutrients than to try the hundred remedies which have the reputation of carrying off water through the various emunctories.

After tonic and nutrient treatment combined with rest, we sometimes find that remedies, previously powerless, become efficacious, and, removing the water, cure the dropsy. Diuresis, under improved nutrition, may even set in apart from the use of special remedies.

In cardiac dropsy, if the patient be placed under favorable circumstances, spontaneous diuresis is not uncommon. In cirrhosis it occurs more seldom; yet I have seen several remarkable instances of it. It is frequent in some forms of Bright's disease. In acute Bright's, indeed, it seems to be a natural termination of the disease; and in the subacute attacks, especially when supervening in chronic cases, it is far from rare. In a case of albuminuria under my care recently, with great and general edema, lasting many months, where purgatives, diaphoretics, and diuretics had been tried fully, but in vain, I saw prolonged rest in bed, with tonic treatment, followed in a few weeks by profuse spontaneous diuresis, which in a fortnight removed every trace of dropsy.

The mode in which removal of fluid may best be accomplished has next to be considered. I propose briefly to call attention to the points which seem to be worthy of discussion in the various means used to eliminate water effused in the abdominal cavity or into the tissues. And, first, I must allude to tapping in ascites. Dr. Frederick Roberts, many years ago, drew attention to the fact that tapping might not only relieve, but cure ascites in cirrhosis of the liver; and many cases have been recorded where, after tapping once to one hundred and thirty-two times, the fluid has ceased to form.

It seems to me there are two factors in the production of ascites

in cases of cirrhosis: obstruction to the passage of blood through the portal vein, and an altered condition of the walls of the peritoneal cavity; and, in hepatic dropsy, sometimes one, sometimes the other, predominates as the cause of effusion.

When the dropsy is due mainly to a block in the portal vein, tapping is almost necessarily followed by fresh effusion;* when chiefly to the condition of the serous membrane, then the mechanical removal of fluid may not be followed by a recurrence, a healthier condition of the membrane having supervened. We have here an apparent exception to what I have stated concerning the comparative inutility of water-removal when tissue-alteration rather than mechanical obstruction causes dropsy. It is only apparent, however; for if the walls of the serous sac remain in the same unhealthy condition as when the fluid was poured out, the good effect of tapping is very temporary, and the abdomen refills with great rapidity. In acute cirrhosis rapidly tending to a lethal termination, where, though the fluid is abundant, the dilated intestines occupy the major portion of the abdominal cavity, the difficulty in breathing and the discomforts of the patient are strong incentives to remove the fluid; yet, in my experience, not even temporary relief follows this procedure. Nor have I seen the slightest good from tapping in advanced cases of ascites dependent on cirrhosis where symptoms of coma have developed. In ascites connected with heart-disease, as well as in ascites dependent on cirrhosis, tapping may lead to the cure of the dropsy. A patient with advanced heart-disease came under my care last year who, about three years before, had been tapped three times; six, four, and five pints of fluid having been removed at short intervals. After the third tapping the fluid did not return for three years. Of such temporary cure I have seen several examples; but they are more rare than in cirrhotic ascites. I can not call to mind a single case of ascites dependent on Bright's disease in which more than temporary relief followed paracentesis.

I know of no way by which it is possible in cirrhosis to distinguish with certainty the cases in which cure can be effected from those in which we can only look for relief. The greater reasons we have to expect serious obstruction in the portal circulation, the more must we fear that the fluid will reform after removal; and enlarged abdominal veins point to such serious obstruction. Yet I have discharged, cured of his ascites, after two tapings and diuretic treatment, a man whose

*Dr. Granger Stewart has called attention to the possibility that such recurrence may at times be prevented by formation of new channels for the blood in the liver.

abdominal veins were distinctly prominent. Tapping soon, and, if necessary, often, then, it seems to me, should be the rule in most cases of cirrhotic ascites, and I think, too, in ascites dependent on heart-disease. Apart from the relief it gives, the removal of the pressure from the renal veins is justly supposed to favor subsequent diuresis. In kidney disease, also, no harm can come of early tapping, unless, indeed, the nutrition of the patient is much depressed. When this is the case, and the fluid is not abundant, tapping seems to give no relief, and only hastens the fatal result.

I should not have brought the question of paracentesis so prominently forward were it not that, as Dr. Duncan, of Croydon, has recently pointed out, tapping for all forms of ascites is still in many works on medicine alluded to as only a remedy to be used as a last resource.

What are the dangers of tapping? Peritonitis, syncope, and exhaustion from the loss of albuminous material are spoken of, but, so far as I know, very few cases in which serious evil has arisen from paracentesis have been recorded.

In four hundred cases of paracentesis of which I have notes, I only find one instance of a bad result following the operation. In this case, rapid peritonitis, ending fatally, followed a complete emptying of the abdominal cavity for the second time. Not unfrequently, however, I have observed pains pointing to peritonitis after the operation. A bad result due to syncope I have feared, but never seen, nor have I noted any considerable effect from the loss of the albuminous fluid; even repeated tapplings cause much less exhaustion than we should expect from the amount of albumen lost on each occasion.

Should the peritoneal sac be completely or even almost emptied, or should we be content with taking away a small quantity of fluid? To the former plan I am averse, since, as I have said, I have seen fatal peritonitis follow on one occasion; yet I have known experienced men prefer it as giving the best results.

Undoubtedly, the removal of a small quantity of fluid, in peritoneal as well as pleuritic effusion, sometimes gives relief and seems to act as an incentive to the absorption of the rest; and where the circulation is extremely weak, as in ascites, with irregular, feeble heart, I have at times tried with success the removal of a small portion of the fluid. One drawback there is to this: unless an excessively fine trocar be used, the puncture left by the instrument continues to weep, and no ordinary means will check the flow of fluid. I have twice seen this occur after the use of a cannula only one eleventh of an inch in

diameter; once the compression of the weeping orifice by needles alone sufficed to check the flow. Now, this prolonged flow is not without danger; I have known fatal peritonitis follow it.

About the comparative advantages of the various modes of tapping, I would just say a few words. I take it that it is never wise to use a cannula with a greater bore than one eleventh of an inch, unless, indeed, for the sake of relieving urgent dyspnea, the effect of pressure.

When but little fluid is to be removed, the very fine tubes of Dr. Southey are, I believe, decidedly the best; but where the quantity to be got rid of is large, and the circulation fairly vigorous, I prefer the small to the very fine cannula, as being less fatiguing for the patient and quite as safe.

The use of fine cannulæ, advocated by Dr. Southey, is beyond all doubt the best means for the mechanical treatment of edema, and should supersede all other plans. I am satisfied they should be used earlier and oftener than they are. Let me strongly indorse the advice of Dr. Goodhart with regard to their employment. He recommends that they be put in some boiling germicide before being employed. In one case under my care recently the neglect of this precaution led to serious results. Phlegmonous erysipelas of the leg, followed by widespread pus-formation and considerable danger to life, followed the use of a fine cannula which had been simply washed before use. Heating the cannula in the flame of a spirit-lamp will serve the same purpose as boiling, but it injures the metal and renders it liable to break.

Diuretics rank next as the most active agents for the relief of dropsy, but about their value there is a great divergence of opinion, to which, it seems to me, two causes mainly contribute. In the first place, they are often used in cases where they can not possibly be of service, and an impression of their inutility is often founded on such use. Diuretics can not eliminate water if, from structural changes in the glomerular tubes, the water-passages are wholly or partially sealed up, nor when tissue-degeneration is far advanced; nor can they act when the kidney is functionally competent, if the tissues generally are in such a condition that they will not yield up their water. The uselessness of some of our reputed diuretics, and the slight value of others, is a second reason for the skepticism with which some regard the whole class.

A careful series of water-measurements, carried on for some years, has satisfied me that diuresis occurring spontaneously must often have been erroneously attributed to the action of the drug given to produce it.

Of the potency and utility of some diuretics there can be no doubt, but the power of this class of medicines is exercised within narrow limits. It is too much influenced by the cause of the watery effusion. In hepatic dropsy, copaiba or its resin seems to give the best result. Caffein sometimes, but less often, promotes diuresis. Digitalis I have rarely found of use; whilst from juniper, squills, and salines I have not been able to assure myself that any increased urine flow has followed.

In cardiac dropsy, digitalis and caffein seem to me by far the most powerful excitors to increased urine flow. Saline diuretics rank next in efficiency. Copaiba in my hands has rarely proved of use. Squill and juniper have disappointed me always, and I have tried them largely. About broom I can not speak with certainty, since I have not used the fresh preparation by itself.

Two years ago, in the Practitioner, I recorded a series of cases illustrating the marked benefit derived from caffein in many cases of cardiac dropsy, and my subsequent experience has confirmed the views I then enunciated. Dr. Breckenridge has recently borne further testimony to the value of the drug as a diuretic. He thinks it should be given by itself when the blood-pressure is fairly normal, but combined with digitalis when the pressure is low. In these points I fully agree with him, for digitalis is, of the two, by far the most powerful vascular diuretic. The arguments he has brought forward, however, in support of his view that caffein acts alone on the renal epithelium seem to me insufficient, nor do I think we can with certainty augur the success or failure of caffein from the condition of the circulation or that of the renal epithelium, as far as it is possible to determine this.

I am satisfied I have seen, both in health and disease, a distinct effect produced by caffein on the circulatory organs, nor will the law of action laid down by Dr. Breckinridge explain several instances both of failure and success in the administration of the drug which I have met with. In renal disease the estimation of the effect of a diuretic is much more difficult than in hepatic or cardiac affections, for diuresis is more often spontaneous. Saline diuretics, especially the tartrate and bi-tartrate, citrate, and acetate of potash have given me the best results. From iodide of potassium, which some have thought so beneficial, I have obtained no definite effects. Digitalis and caffein have seemed occasionally useful, but much less so than in cardiac disease. Where copaiba, squill, and juniper have appeared to succeed, I have usually had reason to doubt their real efficacy. The

inhalation of the oil of juniper has appeared to give me rather better results than its administration by the mouth.

The difference between the time at which the various diuretics commence to act, and the varying periods during which they act, deserve a short notice.

In average doses digitalis rarely acts within thirty-six hours, often not for forty-eight hours, sometimes not for three to five days. If caffein acts at all, its diuretic effect is almost always noticed within twenty-four hours. Copaiba, like caffein, acts quickly, but not with such uniform rapidity. Sometimes a day or two elapse before it affects the urine.

The duration of the action of digitalis is usually longer than that of other diuretics. The diuretic influence of caffein and copaiba are much more transient than that of digitalis, and caffein loses its power very quickly. It can not be relied on for sustained diuresis. Copaiba may be given with advantage a long time, but its effects usually cease at once when the drug is withdrawn. Does the establishment of free diuresis ever do harm? Not in cardiac and kidney disease, as far as I can tell; but, in ascites dependent on hepatic troubles, the experience of Dr. Taylor seems to point to the possibility that the removal of fluid by means of increased kidney action does not always prolong life, and may even shorten it. Out of eight cases in which the administration of copaiba resin was followed by an increased flow of urine and the decrease of ascites, in four coma, followed by death, quickly set in.

Personally, I have never seen any evil appear to follow the removal of dropsy by the aid of diuretics. The relative value of diuretics and purgatives in the treatment of dropsy must now shortly be considered. Many writers, disheartened by the frequent failure of diuretics, have ascribed to purgation a higher value in the removal of dropsy than they accord to diuresis, but with this I can not agree.

That the administration of a hydragogue purgative is at times followed by diuresis and subsidence of swelling is probable, but yet I must say that I have not been able to demonstrate this by actual urine measurements in a large number of cases which have passed through my hands of late years. I think the result more rare than is usually supposed. I never purge actively till I have given a fair trial to diuretics in various forms and conditions, and under these conditions I have not met with encouraging results.

It is true that a considerable amount of fluid is at first carried off by hydragogue purgatives, but the process soon reaches its limit, and

the dropsy ceases to subside, even if the bowels be continuously harried. In two cases of dropsy, when purgation had been long carried out, but unsuccessfully, I noticed at the post mortem a markedly catarrhal condition of the mucous membrane of the small intestine, and I can not help thinking that often more harm than good is done in dropsy by long-continued purgation. For the catarrhal condition of the mucous membrane must interfere seriously with absorption and nutrition. Then, too, in pronounced dropsy, we at times find that severe diarrhea in no way diminishes the edema.

In hepatic dropsy, I am satisfied that very active purgation is rarely beneficial; and in cardiac dropsy, I have much more faith in diuretics. In renal dropsy, however, purgation is often our only resource, and its depurative effect is certainly most advantageous; but even in renal dropsy it has not unfrequently appeared to me that excessive purgation had been productive of more harm than good.

Diaphoretics, in hepatic and cardiac dropsy, I have found of but little service. In renal dropsy they are of great value, but less, it seems to me, by removing fluid than by eliminating from the blood a portion of the material which the kidneys have failed to excrete. I have not witnessed extensive subsidence of dropsy from diaphoresis alone.

Two other methods of treatment I must just allude to—the withholding and free administration of liquids.

The withholding of liquids in cases of dropsy was advocated by the earlier physicians; in later times much less importance has been attached to this plan. But Dr. Cheedle has brought forward a few striking cases illustrative of its utility. He finds that the amount of water excreted is greater, as compared with the quantity ingested, when a small, than when a large quantity of fluid is taken. He does not recommend rigid abstinence from fluid, but only such avoidance as can be borne without discomfort. Personally, I have so far made no experiments on this point.

The free administration of liquids, especially distilled water or milk, has been tried, with the idea that a flush of water through the kidneys might clear the renal tubules.

It has also been thought that increased ingestion of water might, by increasing vascular pressure, originate a diuresis. Dr. Dickinson, in 1864, advocated this plan in the treatment of the nephritis of children; and Bonchoadaur and Dujardin-Beaumetz value highly the use of water and milk in cardiac dropsy. I think I have seen increased ingestion of fluid of service in ascites dependent on cirrhosis, as well

as in cardiac and renal dropsy; but more accurate observations are required before the comparative advantages of an increase or decrease in the supply of liquid to dropsical patients can be even approximately determined.

TURF MOLD OR DUST AS A SURGICAL DRESSING.—Dr. Neuber, in Langenbeck's Archives, reports: A series of experiments upon its use in the dressing of wounds having been carefully carried out, the turf mold is now used in the following manner, which has been very successful: Bags of gauze wrung out in five-per-cent carbolic solution are prepared of two sizes, twelve and twenty-four square centimeters respectively. These are filled with turf mold (or dust), the smaller bag with mold containing two and one half per cent of iodoform, which is laid on the wound directly it has been disinfected with either carbolic solution (two and one half per cent), zinc chloride (eight per cent), or at most three grams of iodoform. Over this is laid the larger bag, the mold in which is saturated with five-per-cent carbolic solution. The whole is kept in place by a gauze bandage. As these exercise a very energetic pressure upon the wound and its surroundings, it has been found unnecessary to use the elastic compressive bandages hitherto in vogue, unless in the case of wounds near the openings of the body. In Esmarch's clinic it has never been found necessary to remove this dressing for secondary hemorrhage, even though the bloodless method is often adopted; and it is the rule to apply a permanent compressive dressing before undoing the tubing above the wound, the only other precautions necessary being that the limb should be elevated and all ligatures applied before closing the opening. In all, there were treated in this manner, from September to the end of November, 1881, fifty-five wounds on fifty-three patients; the list comprising seven resections and osteotomies, seven scrapings out of carious bones and joints, five amputations, twelve extirpations of tumors, six removals of sequestra, five abscesses, thirteen various wounds, among which were seven nerve-stretchings and two herniotomies. There was no fatal case, except one after nerve-stretching for

tabes dorsalis, said to be due to pyemia after disease of the prostate and abscess of the bladder; but such a case should hardly have been operated upon. No diseases of wounds were observed. Thirty-one cases were without fever; aseptic fever occurred eleven times, slight inflammatory disturbance only six times, elevation of temperature four times. In fifty cases the first dressing remained on until the end of the time intended, mostly a fortnight or more; and in only five was it necessary to remove it before that time had elapsed.

Summed up, the advantages of turf dressing are these: 1. A given quantity of the mold takes up more fluid than jute, gauze, or cotton-wool. If it be lightly moistened, its absorbent power is still further increased; wounds remain perfectly dry under it. 2. It possesses a great power of absorbing products of decomposition of organic substances, and hence prevents the same from occurring, and acts even in the unprepared form. Further experiments are being made in this direction. 3. The moistened mold is a very soft but still elastic substance, so that it is easily placed in the required position in the bags before applying them to the inequalities of the body. 4. It is the cheapest of known antiseptic dressings, one pennyworth sufficing for a dressing, and will be more so when it is found that the preparation with some antiseptic can be left out. 5. It makes a very suitable pad for all purposes when inclosed in gauze.

Neuber has further, since the date of his first essay, treated seventy-eight wounds with this dressing, that is, up to February, 1882, and much the same class of cases, with the addition of ovariectomy, hysterectomy, and operation for floating kidney, one case of each. Of all these only three died, namely, one from tetanus, one from delirium tremens and sepsis, one from gangrene of the leg and sepsis after resection of the knee on account of hemophilian inflammation thereof. Altogether, therefore, one hundred and thirty-three cases have been hitherto so dressed. The dressing remained from ten days to six weeks in one hundred and twenty-two cases, and had to be changed only in eight.

In eighty-five per cent of the cases the wound was entirely healed on the removal of the dressing. The remaining fifteen per cent have since been healed or are under treatment.

CHLOROFORM-WATER.—In an article in the *Gazette des Hôpitaux*, of March 25th, attention is drawn to this highly useful preparation of chloroform for internal use. Professors Lasègue and Regnaud have shown that the solubility of chloroform in water does not exceed nine per one thousand. The solution is obtained by pouring an excess of chloroform into a bottle three parts full of distilled water, shaking the mixture repeatedly, and then allowing the insoluble chloroform to deposit until complete transparency is obtained. The separation of the saturated solution is then made by decantation, or by means of a syphon. This solution, being too strong for internal use, requires dilution. (The *Aqua chloroformi* of the British Pharmacopeia has a nominal strength of one in two hundred.) Various salts (as chlorate of potash, borate, bicarbonate, and salicylate of soda) may be dissolved in this water without undergoing any modification; and Professors Lasègue and Regnaud are of opinion that chloroform-water, either pure or diluted, will meet every need in the internal administration of this substance. Having a pleasant taste in the mouth which lasts for a minute or two, it is well calculated to disguise the unpleasant taste of various medicines, as castor-oil, etc. By the direct action which it exerts on the mucous membranes, it may prove useful in certain affections of the mouth, gums, teeth, velum, and pharynx. It exerts a stimulant action on the stomach, but it acts differently according as it is taken before, during, or after a meal, and according to the lapse of time that has intervened between taking the meal and the absorption of the chloroform. Given before a repast, in aid of the appetite, the chloroform-water is a bad agent; but given after a meal, whether alone or combined with an alcoholic wine and sweetened, it increases the stimulant properties of the wine or produces like effects. When administered to allay the manifold troubles which supervene during the course of digestion and

produce its disturbance it has much value. Its maximum therapeutic action is obtained three or four hours after the meal, when functional disturbances show themselves by yawning, distension, gaseous eructations, a sense of epigastric pressure or heaviness, flushings of the face, and threatenings of vertigo. But when the digestive disturbances are manifested by acute lancinating pains of the stomach, oppression, palpitations of the heart, fleeting febrile action, dryness of the mouth, painful tympanites, etc., the action of the chloroform-water is injurious; this stage contraindicates all forms of stimulants. In a word, the chloroform-water acts on the stomach in the same calming way as upon the interior of the mouth, and if it does not cure the affection, at least it mitigates its consequences. It is a remedy for the crisis, but does not render needless the proper treatment-in-chief. It is eminently suitable in painful digestion arising from dilatation of the stomach. (Practitioner.)

THE DIGESTIVE POWER OF COMMERCIAL PEPSIN.—Dr. C. L. Dana reports, in the October number of the *American Journal of the Medical Sciences*, a number of careful experiments as to the digestive value of various forms of commercial pepsin both in the stomach and in artificial digestion.

His experiments show, (1) that different brands have different strength; (2) that the same brand may vary in strength at different times; (3) and that there are a number of details connected with the process of artificial digestion by which the power of the pepsin can be greatly modified. They further show that ten grains of ordinary commercial pepsin will generally digest ten or twelve times its own weight of coagulated egg-albumen, finely-minced, in four to six hours. It has, however, very little effect upon lumps of albumen or upon boluses of lean or cooked meat.

This is the case outside the stomach. If it does no better when given medicinally, or even if it does considerably better, its power as a remedy must be very slight.

In conclusion, he holds that a physician in giving a dose of

good pepsin may believe that it will have a value two or three times greater than that exhibited under ordinary artificial conditions, *i. e.*, it will digest twenty or thirty times its own weight. This conclusion is in harmony with much clinical experience that good pepsin has a real although not a great medicinal value.

Points of practical importance are, that large doses should be given, even of so-called pure pepsins. The physician should always know how much pure pepsin there is in the saccharated preparations. Acid should generally be given immediately before, and the pepsin after meals.

HOW MASSAGE IS DONE.—Dr. Douglas Graham writes in that very valuable journal, the *Popular Science Monthly*, that the multiform subdivisions under which the various procedures of massage have been described can all be grouped under four different heads, *viz.*, friction, percussion, pressure, and movement. Malaxation, manipulation, deep-rubbing, kneading, or massage, properly so-called, is to be considered as a combination of the last two. Each and all of these may be gentle, moderate, or vigorous, according to the requirements of the case and the physical qualities of the operators. Some general remarks here will save repetition: 1. All of the single or combined procedures should be begun moderately, gradually increased in force and frequency to their fullest extent desirable, and should end gradually as begun. 2. The greatest extent of surface of the fingers and hands of the operator consistent with ease and efficacy of movement should be adapted to the surface worked upon, in order that no time be lost by working with the ends of the fingers or one portion of the hands when all the rest might be occupied. 3. The patient should be placed in as easy and comfortable a position as possible in a well-ventilated room, at a temperature of about 70° Fahr. 4. What constitutes the dose of massage is to be determined by the force and frequency of the manipulations and the length of time during which they are employed. A good manipulator will do more in fifteen minutes than a poor

one will in an hour, just as an old mechanic working deliberately will accomplish more than an inexperienced one working furiously. Friction has been described as rectilinear, vertical, transverse or horizontal, and circular. It has been stated, and very properly, that rectilinear friction should always be used in an upward direction, from the extremities to the trunk, so as to favor and not retard the venous and lymphatic currents. But a slight deviation from this method he has found to be more advantageous, for though in almost every case the upward strokes of the friction should be stronger, yet the returning or downward movement may with benefit lightly graze the surface, imparting a soothing influence, without being so vigorous as to retard the circulation, and thus a saving of time and effort will be gained. The manner in which a carpenter uses his plane represents this forward-and-return movement very well. Transverse friction, or friction at right angles to the long axis of the limb, is a very ungraceful and awkward procedure. It has been introduced on theoretical considerations alone, and may with safety be laid aside, for the method already spoken of, together with circular friction, will do all and a great deal more than rubbing crosswise on a limb can do.

TREATMENT OF EMPYEMA.—The American Journal of the Medical Sciences for October contains an instructive article on this subject by Dr. W. C. Dabney, from which we abstract the following :

1. "Medicinal" treatment, as it has been called—namely, treatment without operation—occasionally gives favorable results, but is not advisable, inasmuch as cases so treated are liable to terminate in one or other of the following ways: (*a*) Sudden death, (*b*) exhaustion, (*c*) suffocation, (*d*) phthisis, (*e*) septicemia, (*f*) calcareous degeneration of the pus, (*g*) secondary pneumonia and gangrene of the lung, (*h*) peritonitis from the bursting of the empyema into the peritoneal cavity, (*i*) amyloid degeneration of the liver, kidneys, etc.

2. Aspiration has given good results in the case of children, and should be tried in them before the radical operation is resorted to.

Aspiration and immediate washing out of the pleural cavity through

the aspirator (Kashimura's treatment) has not been used sufficiently often for any conclusion as to its efficacy to be reached.

3. Free incision into the pleural cavity is usually necessary, and the best point for such an incision when only one is made is at the lowest point of the purulent collection, and directly below the angle of the scapula. Costal resection is to be avoided, if possible, especially in children.

4. Continuous is preferable to intermittent drainage, because (*a*) the danger of absorption is thereby lessened, (*b*) there is usually less danger of irritative fever, (*c*) the empyemic cavity is placed in a better position for healing. Continuous drainage is best effected by a drainage-tube.

5. Thorough drainage is only advisable in cases where the discharge is very fetid, and where a single opening has proved insufficient.

6. The thoracic opening should not be allowed to close if more than two drams of pus are discharged daily.

7. The danger of sudden death during thoracentesis or injection of the pleural cavity, when proper care is used, is so slight that it may practically be disregarded; but when injections are used especial care should be taken to see that they have a free outflow.

8. Simple injections of pure water are often sufficient, but compound tincture of iodine, one part to four of water, is devoid of danger and hastens recovery. This will usually check fetor also; but if it does not, salicylic acid or permanganate of potash in one-half or one-per-cent solutions may be employed. Carbolic acid is dangerous, as is boracic acid also.

9. Listerism would probably be advisable in city or hospital practice, but is of doubtful efficacy in the country, and under no circumstances should it be allowed to interfere with thorough drainage.

REDUCTION OF DISLOCATIONS OF THE SHOULDER.—The number of modes of reducing dislocations of the shoulder (London *Lancet*) shows that the best plan is yet generally unknown. A valuable paper on this subject was read by M. Kocher at the meeting of the International Congress in London. Referring only to the subcoracoid form of dislocation, he asserts that the aim of the surgeon should be to open out the rent in the capsule, and to relax the parts of the capsule which are untorn but tightly stretched by the false position of the head of the humerus. The rent in the capsule is on the inner side of it; the most

tense part is in the upper portion, where it is thickened by the coraco-humeral band; the lower part of the capsule is also tense. Kocher asserts that by rotating the arm outward the top of the capsule is itself rotated out and the rent rendered patent. If now the arm be advanced in the vertical median plane, the upper part of the capsule is relaxed, and the head of the bone, being prevented passing forward by the lower fibers of the capsule, enters the glenoid fossa. He accordingly directs that for the reduction of this dislocation the following manipulation should be practiced. The patient should be seated, with the surgeon on his left hand. The elbow-joint is first to be flexed to a right angle, and the joint firmly pressed against the side of the chest; then while holding the elbow in contact with the body the arm is to be slowly, gently, and steadily rotated out until firm resistance is encountered; then maintaining this rotation the arm is to be raised forward and a little in, and lastly to be rotated in and the hand brought toward the opposite shoulder. It is stated that there is no need for anesthetics when this manipulation is employed. This method, which has great advantages over those in common use in this country, is stated by M. Ceppi (*Revue de Chirurgie*) to be especially valuable in old dislocations, enabling them to be reduced often without any force and without anesthetics. M. Kocher has succeeded in twelve cases of dislocations, varying from three weeks to four months old. In one case, where the bone had been displaced for eight weeks, he fractured the shaft of the humerus in attempting the reduction, and six weeks later, when the bone was united, failed again. The patient was seventy years of age. We believe that this method of reduction is worthy of far more attention than it has yet received.

ANIMAL VACCINATION.—In a very sensible article on the above subject in the New York Medical Journal by the editor, Dr. Frank P. Foster, he says:

1. Those who prefer animal vaccine under any circumstances should use it under all ordinary circumstances. By so doing its pro-

duction by proper methods is favored, since a fair amount of pecuniary support is necessary to enable producers to meet the expense involved in those methods. On the other hand, those who prefer humanized vaccine should, whenever they think proper to use the animal virus, bear in mind that success with the latter is to a great degree dependent upon certain details in the mode of its employment—notably, that it should actually be transferred to the abrasion, which transfer, on account of the great tenacity with which it clings to the slip, is not so rapidly accomplished as that of the humanized lymph under like conditions.

2. As at present furnished, all forms of animal vaccine, except dried lymph, are little better than worthless; therefore, no other form than the latter should be used.

3. It has come to be too common a practice for physicians to order vaccine from any apothecary they may chance to deal with, leaving him to procure them any thing in the shape of vaccine that he can make the most profit on. It is by all means advisable always to obtain one's supply directly from the producer or his accredited representative. So-called "companies," as well as tradesmen who employ anonymous producers, should be avoided; the practitioner should make it a point to know who the man is that actually does the work of producing the virus he is to use. It may be added that the choice of material, as between different men's productions, should not be governed in the slightest degree by the difference in their prices. A safe gun can not be had at the price of pot-metal.

If the foregoing considerations are founded in truth, it is the plain duty of the profession to give heed to them; if they are disregarded, any disappointment that may result can not fairly be charged to animal vaccination *per se*. Believing them to represent the truth, and feeling confident that physicians need only have their attention drawn to them to make them set their faces against the loose practices that are now going on in the matter of the production and supply of vaccine, I can not but view the outlook for animal vaccination in this country as a bright one.

DIET IN CHRONIC NEPHRITIS.—Prof. Lichtheism, in an address to the Medico-Chirurgical Society of Berne, treats this subject with much fullness. The ordinary practice, he says, is to prescribe a diet more than usually rich in albumen with a view to replacing the loss from the kidneys. The patient's danger from loss of albumen is, however, much less than that arising

from the imperfect filtration performed by the kidneys, and the consequent retention of nitrogenous waste-products in the blood. For a considerable time this tendency to retention may be counteracted by the increased blood-pressure and cardiac hypertrophy, which effects a sufficient elimination even from the defective kidneys. This being the case, it must needs be unwise to strain this attempted compensation unduly by giving nitrogenous foods in quantity; this merely implies increased production of nitrogenous waste and increased work on the eliminating organs. The result of such a regimen must be a further increase of blood-pressure and greater cardiac hypertrophy, until at last the heart ceases to respond and becomes dilated; in other words, a new difficulty to the embarrassed circulation is raised. By giving food which contained little nitrogen the professor has found that the dyspnea of confirmed nephritics rapidly disappeared. He is inclined to regard this dyspnea not as uremic, but as a simple consequence of insufficient contraction of the heart; analogous, therefore, to the dyspnea of cardiac patients. (Practitioner.)

THE TREATMENT OF HYSTERIA BY METALLO-THERAPY.—The *Archiv für heitere gynäkologie* contains the following instance of such successful treatment of this rebellious disease that the Philadelphia Medical News deems it worthy of notice. Marie O., a chamber-maid in the house of a Privy Councillor in Berlin, was compelled, among various other laborious duties, to light to the door the numerous guests who visited the house nearly every evening. The reporter had occasionally opportunity (she was charming, and nineteen years old) to notice how she comported herself to the visitors who attempted to call a smile to her lips by liberal "trinkgelder." This, however, was no easy task; on account, probably, of some anomaly of menstruation she was hysterical, apparently; always solemn, almost melancholy in her bearing; sometimes he even thought he saw tears in her eyes. This case of hysteria, thus clearly made out, seemed to him in every way suitable for the study of the influence

of metals on the psychical state, and the reporter determined at the next evening reception to which he was invited to institute some experiment on this point. Accordingly he posted himself behind her as the guests passed out in leaving the house; when nickel, copper, or silver in pieces of small circumference came in contact with her beautiful hand, the melancholic condition remained unaltered, became even indeed painfully exaggerated. A larger piece of silver, apparently about as large in size as a five-mark piece, seemed reflexly to call forth some transitory improvement. Suddenly, however, as a handsome young baron passed before her and with a meaning look pressed something into her outstretched hand, he believed that a complete cure had been accomplished; he looked closer—it was a gold ten-mark piece.

The above case is reported as showing the comparative value of gold and other metals in the treatment of hysteria; it would seem that, to be equally efficacious, silver must be applied in larger quantities than gold.

ETHER-INHALATIONS IN ANGINA FAUCIUM.—Prof. Concato, of Bologna, has, for the last year or so, been accustomed to administer ether-spray as an inhalation in sore-throat. His method is simple. The patient takes the exit-tube of a Richardson's spray-producer in his mouth; sulphuric ether is sprayed against the pharynx for three minutes, and the treatment is repeated every three hours. Six cases so treated were cured without other means. The cases are all described as "anginas," of what variety is not quite clear. Each case, however, began with a rigor and a sharp attack of fever, with a temperature of 40° C. (104° F.) Swelling of the sub-maxillary glands in nearly all the cases, and pain and difficulty of swallowing in all of them, were noted. The tonsils were always swollen and protruding. One of the patients, a girl of eleven, had scarlatina succeeding to the angina. Another patient, whose attack of sore-throat lasted eleven days, and was very severe, had enlarged spleen. Four or five days was the average duration of the attack; one patient, how-

ever, attended by Prof. Concato at home, got well in twelve hours. It is set down as an advantage of the ether treatment that it very speedily puts an end to the local pain and diminishes the swelling, and so quickly restores the power of easy swallowing. In some cases the fever quickly subsided at the same time. The treatment is worthy of further trial. (Practitioner.)

TREATMENT OF ASCARIDES LUMBRICOIDES.—Dr. Guermontprez sums up a long article on lumbricoides thus: (1) Worm-seed (whose action is not to be confused with that of santonin) is by far the best medicament for killing as well as expelling round worms; (2) santonin does not kill the worms outright, it excites them to livelier movements, and these may reflexly stimulate the intestine so as to expel them; but they may also only exaggerate the evil if there is obstruction; (3) santonin is, therefore, by no means always to be chosen. It does no harm if the worms are young and not numerous; if they are mature and many it may be dangerous even in reasonable doses; (4) the purgatives usually given with vermifuges probably do more than the latter to cause expulsion of the worms; simple evacuants will often suffice; (5) ordinary hygienic means directed to overcoming the lymphatic cachexia of the patient, or simple change of food and abode, may at times be enough to rid him of the worms without any medicine whatever; (6) hence, our treatment should not be the mere routine administration of santonin, but should be determined by the circumstances of the case. Change of air and of diet and simple evacuation are not to be forgotten. (Practitioner.)

WHY IS CHLOROFORM SO WELL BORNE IN MIDWIFERY?—Dr. Fancourt Barnes answers this question, in the *British Medical Journal*, by saying: "It has long been a recognized fact that the administration of chloroform in midwifery is not followed by the deaths which so frequently happen when it is given during surgical operations. No explanation has, so far as I know, yet been given. The explanation, I believe, lies in the condition of

the heart and vascular system during pregnancy. The changes undergone by the heart and vascular system during gestation are well known. The heart becomes hypertrophied, the venous system becomes enlarged by the distention of existing veins and the development of fresh venules. The quantity of blood is increased. When chloroform produces fatal syncope, it does so by its depressing action on the heart. The weaker the heart, the more readily does it succumb to the paralyzing action of chloroform. This is well known. When, however, the heart is strong, stronger than usual, as in the hypertrophied heart of pregnancy, it can more easily withstand the action of chloroform. Is not this the reason that the hypertrophied heart of pregnancy is unaffected by chloroform? I think it is clearly so."

SANDIDGE'S METHOD OF TREATING HYDROCELE.—Dr. Robert F. Weir, of New York, in an article on the treatment of hydrocele, published in the *Medical Record*, thus writes of carbolic acid injections as a remedy in this affection, but gives the credit of the procedure to Dr. Levis, of Philadelphia, instead of to Dr. Sandidge, of Edmonton, Ky:

I was led to adopt this mode of treatment, and though prepared by my previous experience to believe that the carbolic injections were not very irritating, yet I was most agreeably surprised to find that the strong acid was, in the instances which have come under my notice, absolutely painless, or so very slightly so as to be insignificant. In my services at Bellevue Hospital as well as in private practice, I have used this injection in thirteen patients, four of whom had double hydrocele, with only one failure. In the double hydrocele both sacs were injected at the same sitting. In this instance there was re-accumulation, and a second injection of the pure carbolic acid two weeks later was followed by a cure. In this action I afterward learned how to precipitate, for the fluid when reformed will gradually disappear, as after an iodine injection. In a majority of instances there was not such a re-accumulation of fluid, but there was considerable thickening of the whole tunica vaginalis, both parietal and visceral. This thickening will last three or four weeks, sometimes longer. Patients are at no time incapacitated from attending to their usual vocations, though Levis speaks of their being detained a day at most from such. In

every instance the urine was carefully tested for three or four days subsequent to the operation, in order to determine whether or not there had been absorption of carbolic acid. None was observed in any case. The quantity injected was one half to one and one half drams.

TANNATE OF CANNABIN AS A HYPNOTIC.—Dr. Fronmüller, of Furth, reports some experiments he has made with this drug, and observes that the dose of the tannate ranges between gr. ii and gr. x, the most frequent dose being gr. v. The drug was used fifty-seven times in hospital, and six times in private practice. The patients consisted of twenty-one men and forty-two women. Forty of them were suffering from phthisis, the remainder had different diseases, generally of a chronic nature. The common symptom in all cases was insomnia, and it was for its hypnotic effect that the cannabin was given. Good results were obtained in thirty-seven cases out of the sixty-three, and moderately good results in fifteen cases. It was called a good result when quiet and uninterrupted sleep came on within an hour after taking the medicine, the patient awakening with no toxic after-effects. In twelve cases no result was produced. Many of the patients had been taking opium. From the sixty-three trials thus reported, Dr. Fronmüller concludes that *cannabin tannicum* is a very useful hypnotic, powerful without being dangerous, and one which does not disturb the secretions or leave unpleasant toxic after-effects, if given in proper dose. (Practitioner.)

THE ELASTIC BANDAGE IN THE TREATMENT OF VARIOUS SURGICAL DISEASES.—Sée speaks highly of the elastic band in the treatment of the following diseases: (1) Edema of the limbs due to cardiac, hepatic, or venous disease, or to cachexiæ. (2) As an adjuvant to massage in the treatment of sero-plastic effusions remaining after diffuse phlegmon. (3) Interstitial effusions of blood due to contusions, etc. (4) Chronic serous arthritis after acute joint disease. (5) Circumscribed or diffuse inflammation in all stages of its development. The elastic sup-

port here replaces the weakening poultice, and is, besides, superior to the latter through its influence over the blood-flow. (6) Ecthyma of the limbs, and ulcers (atonic, callous, varicose). (7) Recent sutured wounds. The bandage is here applied over a Lister's dressing. Certain general precautions are to be observed, such as extremely slight pressure, exact overlapping of each turn, and the elastic band to be changed every two or three days and washed in a solution of carbolic acid. The bandage acts by its constant equable pressure, it also retains the cutaneous secretion (thus acting more or less as a tepid compress or poultice), and by preventing the entrance of spores, etc., effectually aids the antiseptic dressing. (*Bull. de la Soc. de Chir. de Paris.*)

COMPOUND CATHARTIC PILLS.—Dr. Dabney Palmer, of Monticello, Fla., recommends in the American Journal of Pharmacy the following slight change in the formula for compound cathartic pills (U. S.) on account of its rendering them less drastic and more cholagogue in their action. It has been thoroughly tested in this part of the country, and is found superior to the U. S. formula in every particular, and I respectfully suggest it for consideration by the revisers of our standard. In this the calomel is increased and the gamboge diminished, as follows:

R	Ext. coloc. comp.,	}	$\bar{a}\bar{a}$ gr. $1\frac{1}{2}$	
	Calomel,			
	Ext. jalap,		gr. 1	
	Gamboge,		gr. $\frac{1}{4}$	M.

DETECTION OF DRUGS IN THE MOTHER'S MILK.—Dr. Ewald has made some researches on the appearance of drugs in the mother's milk, experimenting with iodine, iron, mercury, lead, quinia, and alcohol. Iodine and iron were discovered in the milk. He refers to Dolan's successful experiments with arsenic. Mr. Ewald did not find arsenic in the mother's milk—probably due to the smaller doses given. (Translated from *Berlin. Klin. Wochens.* for the AMERICAN PRACTITIONER.)

Notes and Queries.

AFTER a dinner given to Mr. Herbert Spencer by his many admirers in New York, the distinguished guest thus in part spoke of what has been called "The Gospel of Work" in America:

It seems to me that in some respects Americans have diverged too widely from savages. You know that the primitive man lacks power of application. Spurred by hunger, by danger, by revenge, he can exert himself energetically for a time, but his energy is spasmodic. Monotonous daily toil is impossible to him; it is otherwise with the more developed man. The stern discipline of social life has gradually increased the aptitude for persistent industry until among us, and still more among you, work has become with many a passion. This contrast of nature has another aspect. The savage thinks only of present satisfactions and leaves future satisfactions uncared for. Contrariwise the American, eagerly pursuing a future good, almost ignores what good the passing day offers him, and when the future good is gained he neglects that while striving for some still remoter good. What I have seen and heard during my stay among you has forced on me the belief that this slow change from habitual inertness to persistent activity has reached an extreme from which there must begin a counter change—a reaction. Every where I have been struck with the number of facts which told, in strong lines, of the burdens that had to be borne. I have been struck, too, with the large proportion of gray-haired men, and inquiries have brought out the fact that with you the hair commonly begins to turn some ten years earlier than with us. Moreover, in every circle I have met men who had themselves suffered from nervous collapses, due to stress of business, or named friends who had crippled themselves by overwork, or had been permanently incapacitated, or had wasted long periods on endeavors to recover health. I do but echo the opinion of all the observing persons I have spoken to, that immense injury is being done by this high-pressure life. The physique is being undermined. That subtle thinker and poet whom we have lately had to mourn, Emerson, says

in his essay on "The Gentleman," that the first requisite is that he shall be a good animal. The requisite is a general one—it extends to the man, to the father, to the citizen. We hear a great deal about "the vile body," and many are encouraged by the phrase to transgress the laws of health, but nature quietly suppresses those who treat thus disrespectfully one of her highest products, and leaves the world to be peopled by the descendants of those who are not so foolish. Beyond these immediate mischiefs there are remoter mischiefs. Exclusive devotion to work has the result that amusements cease to please; and, when relaxation becomes imperative, life becomes dreary from lack of its sole interest—the interest in business. The remark current in England, that when the American travels his aim is to do the greatest amount of sight-seeing in the shortest time, I find current here also; it is recognized that the satisfaction of getting on devours nearly all other satisfactions. When recently at Niagara, which gave us a whole week's pleasure, I learned from the landlord of the hotel that most Americans come one day and go away the next. Old Froissart, who said of the English of his day that "They take their pleasure sadly after their fashion," would, doubtless, if he lived now, say of the Americans that they take their pleasures hurriedly after their fashion. In large measure with us, and still more with you, there is not that abandonment to the moment which is requisite for full enjoyment, and this abandonment is prevented by the ever-present sense of multitudinous responsibilities. So that beyond the serious physical mischief caused by overwork there is the further mischief, that it destroys what value there would otherwise be in the leisure part of life. Nor do the evils end here. There is the injury to posterity. Damaged constitutions reappear in children and entail on them far more of ill than great fortunes yield them of good. When life has been duly rationalized by science it will be seen that among a man's duties that of the body is imperative, not only out of regard of personal welfare, but also out of regard for descendants. His constitution will be considered as an entailed estate which he ought to pass on uninjured, if not improved, to those who follow; and it will be held that millions bequeathed by him will not compensate for feeble health and decreased ability to enjoy life. Hereafter, when this age of active, material progress has yielded mankind its benefits, there will, I think, come a better adjustment of labor and enjoyment. In brief, I may say that we have had somewhat too much of the "gospel of work." It is time to preach the gospel of relaxation.

This is a very unconventional after-dinner speech. Especially it

will be thought strange that in returning thanks I should deliver something very much like a homily. But I have thought I could not better convey my thanks than by the expression of a sympathy which issues in a fear. If, as I gather, this intemperance in work effects more especially the Anglo-American part of the population—if their results are undermining of the physique, not only in adults but also in the young, who, as I learn from your daily journals, are also being injured by overwork—if the ultimate consequence should be a dwindling away of those among you who are the inheritors of free institutions, and best adapted to them, then there will come a further difficulty in the working out of that great future which lies before the American nation.

SMOKING IN RUSSIA.—The smoke which most forces itself upon the attention of travelers in Russia is neither the smoke of the peasant's *isba* nor the vapor from "flaming towns." It is the smoke caused by the burning of tobacco in the debatable and much-debated fashion pursued in the countries of Western Europe. Here, however, lack of power or want of will to smoke is well nigh unintelligible. A man who objects to smoking is a much more insufferable nuisance than the man who insists upon smoking. To tell the truth, however, neither of these two classes exists in this country. The Russians do not divide society into smokers and non-smokers; they decline to make railway carriages a sort of battle-ground for those who love the weed and those who do not; they refrain from suggesting, either by word or deed, that a man's social qualities or respectability can be at all correctly inferred from his attitude towards tobacco. The reason of this is that in Russia every body smokes, and provision is made accordingly. Save the church, no place is here sacred from the weed. The papyros is no respecter of domestic sanctities. Every chamber of every well-kept house has its *pepelnitsa* for the reception of cigar ashes. Hotels have similar conveniences, smoking being practiced as well as permitted in every accessible apartment in these buildings. In England the railway traveler is left to dispose of his cigar ashes either by depositing them on the floor of the compartment or by disposing of them through the window. In the former case the result

is always uncleanness; in the latter the wind sometimes interferes with the smoker's project, not alway to the convenience of his fellow-passengers. Here railway authorities provide a small box or receptacle in each carriage for the use of those who smoke. The "tobacco question" is all the more easy to deal with in Russia for the reason that women smoke as well as men. The Russians themselves—I am here giving a masculine opinion of the masculine sex—are inclined to disparage feminine indulgence in the weed and to regard the women who smoke as as socially "fast." It is true enough that one sees few women smoking here in the street. Public use of tobacco in the daytime is confined among the female sex to the peasant classes. At the same time disinclination to be considered "fast" is no proof of a woman's incapacity to consume large quantities of tobacco. As a matter of fact the women of the middle and the upper classes in St. Petersburg are all of them, with rare exceptions, inveterate smokers. The silver or gold papyros case is much more indispensable than a fan to a lady mixing in society. To be without cigars is to be careless of one's reputation. For a guest, lady or gentleman, to decline a papyros, is one of the most serious social offences that can be committed.

THE ILLNESS OF SIR THOS. WATSON.—The following account of the illness of this beloved physician is given to the British Medical Journal by the baronet's medical attendant, Mr. John Walters:

Sir T. Watson, now in his ninety-first year, had returned a few weeks ago from the seaside, and was staying with his son at Reigate Lodge, previously to returning to London for the winter, and was in the enjoyment of his usual good health. On Sunday afternoon (October 22d), after rising from his chair, he found he was unable to stand, and, inclining to the left, would have fallen if he had not received support from those at hand; subsequently, in trying to write a letter, he could not remember how to spell the simplest words.

On visiting him two hours after, I found him perfectly rational and collected. He said he could not explain his symptoms; he felt perfectly well, but could not stand without help; when he tried to do so

he fell over to the left side. The pupils were somewhat contracted, and answered to the stimulus of light. Pulse 78, regular; arteries somewhat rigid and tortuous; heart-sounds very feeble, with a metallic ring over the aortic valves; extremities rather cold. There was no apparent paralysis, but the face was slightly flattened on the left side, and the tongue inclined somewhat to the left. He was able to walk up stairs to bed with assistance. The urine was found afterward to be alkaline, but contained no albumen. The temperature was subnormal. He passed a fair night. On the 25th he was seen by Dr. G. Johnson with me. His condition was much the same as when first seen, and he was able to take a fair amount of nourishment and some stimulant. On the 26th, after slight exertion, an alarming attack of dyspnea came on, with coldness and lividity of the extremities. This passed off after the administration of some stimulant, and he walked to his bed-room with assistance.

On the 27th he took but little nourishment, and was much exhausted; he became drowsy toward evening, and his tongue dry and parched. As his condition seemed alarming, Dr. Greenhow was asked to see him with me. The next morning we found his condition much improved; the temperature normal; tongue moist, but coated with a white fur; the pulse 84 and regular. He had taken light nourishment, and slept for some hours; he was perfectly sensible, and had no further paralytic symptoms. Since this his condition has varied but little; and, on being visited by Dr. Johnson again on the 28th, he found him in just the same state he was on the 27th. During the last few days the pulse has gone down to about 60, regular, of fair quality; he has no obvious paralysis; the face and tongue remain as when first seized, except that the flattening of the left side of the face is more marked. The urine has become acid, and now contains a trace of albumen. The breathing is at times irregular when asleep, approaching the condition known as "Cheyne-Stokes'" respiration; the bowels have acted several times without assistance; and the urine is voided naturally. He only takes the lightest kind of nourishment, dozes a good deal, and usually sleeps several hours during the night. He has not been able to leave his bed since the attack on the 26th of October. He is easily roused if dozing, and his mind remains quite clear.

The opinion we have formed is that there is thrombosis of some of the smaller cerebral arteries on the right side (probably supplying the region of the parieto-occipital fissure). The prognosis is naturally grave.

A week later the following was added to the foregoing :

We regret to learn that during the last week Sir Thomas Watson has lost flesh and become gradually helpless. There is no increase of his paralytic symptoms. His pulse has varied between 70 and 80 per minute, and is still of fair quality. His voice is distinct and his mind is quite clear. He has taken little nourishment except milk, and not much of that. On Tuesday and Wednesday he suffered much from strangury, caused by scanty secretion of urine, which contained red sand and blood; this symptom had increased so much on Wednesday, that he requested that a telegram might be sent to Professor Lister to come and see him. We learn by telegram on Thursday, through the kindness of Dr. Walters, that the illustrious patient has been much easier since the measures taken by Mr. Lister; but he takes hardly any nourishment, and is sensibly weaker, although still in possession of his mental powers.

LITTELL'S LIVING AGE FOR 1883.—This standard weekly magazine, now nearly forty years old, continues to afford the most convenient means of keeping informed in the best literature of the day and abreast with the work of the most eminent writers. It gives an amount of reading unequalled by any other periodical, and is the only satisfactorily complete compilation of a current literature which embraces more and more every year the productions of the ablest writers and thinkers in all departments of literary and scientific work. Hence its importance and value to American readers. It fills the place of many quarterly, monthly, and weekly publications, and the reader is thus enabled at a small expenditure of time and money to keep pace with the best thought and literature of the time. The prospectus is worthy the attention of all who are selecting their periodicals for the new year. Reduced clubbing rates with other periodicals are given; and to new subscribers, remitting now for the year 1883, the intervening numbers are sent *gratis*. The physician who reads Littell's Living Age regularly will have a knowledge of the best current thought in letters, art, history, and science sufficient for all his daily needs. Nor can he select a better literary companion for his home and his family. Littell & Co., Boston, are the publishers.

RESIGNATION OF DR. O. W. HOLMES.—Though it has been for some time asserted that Dr. Oliver Wendell Holmes contemplated resigning the chair of anatomy in the Harvard Medical School, no definite announcement of the fact was made to the public until last week. At the request of the officers of the board of government, the resignation will be permitted to remain in abeyance until satisfactory arrangements can be made for permanently filling the vacancy, and for the present the Doctor will continue with his lectures to the first class of the school, which is the only one that comes under his department of instruction. His retirement is not enforced by ill-health or the inaptitude incident to increasing years, but is induced by his desire to give attention hereafter more particularly to literary pursuits. This decision on his part, while reluctantly consented to by the college authorities, will doubtless be viewed with complacency, to say the least, by the general public, who will argue that, while the technics of anatomy may be taught by another, there can be but one Dr. Holmes in literature. That his professional career has been one of great ability and usefulness, its continuance through a period of thirty-eight years proves. . . . In laying aside the gown of the professor, Dr. Holmes gains, as is well said by the Philadelphia Medical News, a well-earned exemption from hard work, and all will join in the wish that the pleasures of his literary "vacation," now about to begin, may be many and long-continued.

PULVIS DOVERI.—People whose "inward griefs and peristaltic woes" have been relieved by the power of Dover do not generally know to whom they are indebted for this excellent compound. Dr. Dover was a friend and probably pupil of the great Sydenham. He commenced practice in Bristol where, having made some money, he longed to make more. The Roll of the College of Physicians tells us that he joined with some merchants in fitting out two privateers for the South Seas, in one of which, the "Duke," he himself sailed from Bristol, August 2, 1708. On the passage out they touched at the Island of Juan

Fernandez, where Dover, on the 2d of February, 1709, found Alexander Selkirk, who had been alone on the island for four years and four months, and whom Dover brought away in the "Duke." In the April following Dover took Ginaguil, a city or town of Peru, by storm. In December, 1709, the two privateers took a large and valuable prize, a ship of twenty guns and one hundred and ninety men, to which Dover removed from the "Duke," taking Alexander Selkirk with him as master, and finally reaching England in October, 1711. After this cruise Dr. Dover removed to London, where his practice soon became great. His patients, and the apothecaries who wished to consult him, addressed their letters to the Jerusalem Coffee-house, where at certain hours of the day he received most of his patients. (Can. Jour. of Med. Sci.)

REMONSTRANCE OF AN ASYLUM SUPERINTENDENT, on the suggestion of a doctor that those who associate with the insane transmit the disorder to their offspring (British Med. Journal):

Dear Doctor, I beg you—pray you—don't tell us
That you really believe in an insane bacillus!
That in mingling with patients we're breathing an air
Full of germs of mad phrenzy and hopeless despair;
That, although our own minds may seem perfectly sane,
Parasitical growths will forever remain
In our system, infecting the blood and the brain:
So that, if, by good luck, we ourselves don't go mad,
The child will inherit the germs of its dad!

Already, in truth, are our troubles enough,
Without being told this nonsensical stuff;
In peril from blows, in peril from flurry,
In peril from fire, in peril from worry,
In peril from Lunacy Board and Committee;
Are these not sufficient, dear sir, in all pity?
Forbear then to talk, I beseech you, until I
Have time to examine these wretched bacilli.
But if you insist on such growths diabolic,
Pray send me a bottle of mental carbolic.

Editors American Practitioner :

"The infrequency of persisting paralysis of sensation in cases of hemiplegia is an interesting fact, of which it is not easy to offer a satisfactory explanation." (Flint, sr.)

The explanation, whether satisfactory or not, must be sought after in the structures immediately concerned, and, in doing so, the general *plan* of the human organization (viz. absorbents and emunctories, veins and arteries, nerves of sensation and nerves of motion) ought not to be lost sight of. In cerebral lesions the motor nerves, I imagine, are primarily affected, as the arteries are in analogous cardiac lesions, the main difference between the two consisting in the fact that in the former case lesions of continuity are the rule, in the latter the exception. Centric *shock* is a natural sequence of centric injury, and whenever the former is recovered from the sensory (sensitive) nerves resume their function; whereas, so far as motion is concerned, the injury remains.

ST. JOHN'S ASYLUM, KY.

W. P. ORR, M.D.

IN MEMORIAM. ERASMUS D. FORÉE—1817-82.—Our valued cotemporary, the Edinburgh Medical Journal, makes the following kindly mention of our remarks on the occasion of the death of our beloved friend, Dr. Forée :

Dr. D. W. Yandell, of Louisville, Ky., who was the author of an admirable discourse on the life and character of Dr. Richard Oswald Cowling, which appeared in our August number, now sends us the above "In Memoriam," which he delivered under very striking circumstances at a meeting of the physicians of Louisville, 28th February, 1882. The opening sentences will show what we mean. "Mr. Chairman : Last Saturday morning, meeting Dr. Forée, he asked me if I had finished the address on Dr. Cowling, which I am to deliver now in a few hours. On being answered that I had, he appointed Sunday evening as the time when he would come to my house to hear it read. He loved Dr. Cowling, and wished to hear what I said of him. Sunday morning I awoke to the news of the sudden death the evening before of Dr. Forée."

Our space prevents us from giving the "In Memoriam" of Dr. Forée in full; but we may say that Dr. Yandell, who evidently possesses the gift of drawing appreciative portraits of his professional

friends, makes it very clear that a remarkable member of our profession has been lost to the community of the large city on the banks of the Ohio.

DR. JEPHSON, a distinguished physician of Leamington fifty years ago, was noted for being brusque and unceremonious. A great London lady, a high and mighty leader of society, who was taken suddenly ill, sent for him. Jephson was so off-hand with her grace that she turned on him angrily and said: "Do you know to whom you are speaking?" "Oh, yes," replied Dr. Jephson, quietly, "to an old woman with the stomach-ache."

THE SUNFLOWER. — A writer in a London journal says: "There would indeed appear but few purposes to which the sunflower can not be turned with advantage to mankind. Scientifically dealt with, it will supply us alike with our morning roll and our evening cigar. It is equally susceptible of conversion into a cake of soap surpassingly emollient, or into a rich and lustrous silk dress. As oil it may be consumed no less freely in the salad-bowl than in the table-lamp. Cattle will fatten sooner upon sunflower cake than upon linseed cake. The little busy bee improves each shining hour more profitably in connection with the girasol than with any other opening flower. In fact, so numerous are its excellences and so beneficial its virtues that the sunflower may with great propriety be designated the friend of man."

